

U. S. ENVIRONMENTAL PROTECTION AGENCY
UNDERGROUND INJECTION CONTROL PERMIT
AUTHORIZATION TO OPERATE A CLASS II INJECTION WELL
EPA UIC PERMIT NUMBER KYI0230

Pursuant to the Underground Injection Control regulations of the U.S. Environmental Protection Agency codified at Title 40 of the Code of Federal Regulations, Parts 124, 144, 146 and 147,

Loeb & Steinwachs
P. O. Box 524
Lawrenceville, IL 62439

is hereby authorized to operate and plug and abandon the following existing Class II enhanced recovery injection well:

Tom Howard No. 6W
Oil Springs Field
Magoffin County, Kentucky

Carter Coordinate 2-P-78, 975' FSL x 1875' FWL

This authorization is in accordance with the limitations, monitoring requirements and other conditions set forth herein. This permit consists of this cover sheet; Part I, 5 pages; Part II, 13 pages; and Part III, 2 pages.

All references to Title 40 of the Code of Federal Regulations are to regulations that are in effect on the date that this permit becomes effective.

This permit shall become effective on JUN 19 1989.

This permit and the authorization to inject shall remain in full force and effect during the operating life of the well, unless this permit is otherwise modified, revoked and reissued, terminated, or a minor modification is made as provided at 40 C.F.R. §§144.39, 144.40 and 144.41. This permit shall be reviewed at least once every five years from the effective date.

JUN 19 1989

Date

Bruce R. Barrett
Bruce R. Barrett, Director
Water Management Division
U.S. Environmental Protection Agency
Region IV

PART I

WELL SPECIFIC CONDITIONS

SECTION A. CONSTRUCTION REQUIREMENTS

Casing and Cementing

The permittee shall maintain casing and cement in the well to prevent the movement of fluids into or between underground sources of drinking water. In addition, the permittee shall be required to perform the work set forth in Part III, Section A.

SECTION B. OPERATING REQUIREMENTS

1. Injection Operation

Beginning on the effective date and lasting through the term of this permit, the permittee is authorized to inject only fluids brought to the surface in connection with conventional oil and natural gas production from the permittee's operations in the Oil Springs Field for enhanced recovery operations under the following conditions:

(a) Injection Zone

Injection shall be limited to the Weir Sand in the perforated interval between 993 feet and 1017 feet below land surface.

(b) Injection Pressure Limitation

- (i) Maximum injection pressure, measured at the wellhead, shall not exceed 200 psig.
- (ii) Injection at a pressure which initiates or propagates fractures in the confining zone or causes the movement of injection or formation fluids into an underground source of drinking water is prohibited.
- (iii) Injection between the outermost casing protecting underground sources of drinking water and the well bore is prohibited.

2. Loss of Mechanical Integrity During Operation

The permittee shall cease injection if a loss of mechanical integrity as defined at 40 C.F.R. §146.8 becomes evident during operation. Operation shall not be resumed until the permittee has complied with the provisions of Part II, Section G, of this permit regarding mechanical integrity demonstration and testing.

The permittee shall notify the Director of the loss of mechanical integrity in accordance with the reporting procedures in Part II, Section E, item 12(d).

SECTION C. MONITORING REQUIREMENTS

1. Sampling and Analysis Methods

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Grab samples shall be used for the laboratory analysis of the physical and chemical characteristics as specified in Part I, Section C, item 3(a). Test methods and procedures shall be as specified at 40 C.F.R. §136.3 or 40 C.F.R. Part 261, Appendix III. When the analytical method for a particular parameter is not specified at either 40 C.F.R. §136.3 or 40 C.F.R. Part 261, Appendix III, the permittee must obtain the Director's approval of the method used. The permittee shall identify the types of tests and methods used to generate all monitoring data. Reports to be generated from monitoring data are specified in Part I, Section D.

2. Injection Operation Monitoring

The permittee shall monitor the operation of the injection well as follows:

| <u>Parameter</u> | <u>Monitoring Frequency</u> |
|--|-----------------------------|
| Injection Pressure (psig) at Wellhead | Weekly |
| Flow Rate (barrels/day) of Injected Fluid | Weekly |

Cumulative Volume (barrels)
of Injected Fluid

Weekly

Observation and recording of injection pressure, flow rate, and cumulative volume shall be made over equal time intervals beginning on the date on which the well commences operation. Recordings shall be of representative values.

3. Injection Fluid Analysis

The permittee shall conduct an injection fluid analysis at least once every twelve months and whenever changes are made to the injection fluid. Analyses shall be made beginning within twelve months from the effective date of this permit, or twelve months from the most recent analysis, whichever is later. An analysis must include:

- (a) pH, total dissolved solids, and specific gravity; and
- (b) a list of all chemicals and their composition used for any well stimulation and fracturing during that sampling year; and a list of any additives used and their chemical composition, including any inhibitors used to prevent scaling, corrosion, or bacterial growth. These lists should indicate the brand name of the product and the manufacturer.

On the written request of EPA, an injection fluid analysis shall include the following additional constituents: barium, calcium, total iron, magnesium, sodium, bicarbonate, carbonate, chloride, sulfate, carbon dioxide, dissolved oxygen, hydrogen sulfide, and purgeable aromatic hydrocarbons.

SECTION D. REPORTING REQUIREMENTS

1. Reports on Well Tests and Workovers

Within ninety (90) days after the completion of the activity, the permittee shall report to the Director the results of the following:

- (a) Mechanical integrity tests other than those specified in Part III; and
- (b) Any well workover, logging or other test data, other than those specified in Part III, revealing downhole conditions.

2. Reporting of Monitoring Results

Monitoring results, as specified in Part I, Section C, shall be reported each year on EPA Form 7520-11 and must be postmarked by the 28th day of the month following the first full year after the effective date of this permit.

Copies of the monitoring results required by Part I, and all other reports required by Part II, shall be submitted to the Director at the following address:

U. S. Environmental Protection Agency
Region IV, Water Management Division
Ground-Water Protection Branch
Underground Injection Control Section
345 Courtland Street, NE
Atlanta, Georgia 30365

3. Reporting of New Wells Drilled Within the AOR

Within ten (10) days after spud date, the permittee shall report to the Director by certified mail, return receipt requested, the construction plans for any new well within the AOR of the permitted facility that will penetrate the confining zone or injection zone. The permittee shall provide information on proposed construction (including location and quantities of cement), location and depth. This requirement applies to any construction activity regardless of ownership of the well.

If the construction of the new well will not protect USDWs from contamination, the Director may terminate the permit under 40 C.F.R. §144.40(a)(3) if he or she determines that continued injection may endanger human health or the environment.

SECTION E. PLUGGING AND ABANDONMENT PLAN

Plugging and abandonment of the permitted injection well shall be in accordance with Part II, Section F of this permit and 40 C.F.R. §146.10.

The plugging of this injection well shall be performed in the following general manner:

- 1) Kill well as necessary with lease water.

- 2) Run in hole with cement retainer on tubing and set + 50' above top perforation. Establish injection rate with fresh water. Squeeze injection perfs with 20 sacks Class "A" cement.
- 3) Stab out of retainer and place 20 sacks of cement on top of retainer.
- 4) Pull up to 700' and place a cement plug inside the 4 1/2" casing from 700'-500'. WOC.
- 5) Tag top of cement with tubing to verify placement and solidification.
- 6) Pull up to 50' and place a cement plug inside the 4 1/2" casing from 50' to 4' below ground surface.
- 7) Cut casing strings 4' below ground level, weld steel plate on top and restore site.

PART II
GENERAL PERMIT COMPLIANCE

A. EFFECT OF PERMIT

The permittee is allowed to engage in underground injection in accordance with the conditions of this permit. The permittee, authorized by this permit, shall not construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR Part 142 or may otherwise adversely affect the health of persons. Any underground injection activity not specifically authorized in this permit is prohibited. Compliance with this permit does not constitute a defense to any action brought under the SDWA, or any other common or statutory law or regulation. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Nothing in this permit shall be construed to relieve the permittee of any duties under applicable regulations.

B. PERMIT ACTIONS

1. Modification, Revocation, Reissuance and Termination. The Director may, for cause or upon request from the permittee, modify, revoke and reissue, or terminate this permit in accordance with 40 CFR §§ 144.12, 144.39, and 144.40, including but not limited to the following:

124.5,

- (a) Alterations. There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in this permit.
- (b) Information. The Director has received information which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance.

This permit may be transferred to a new owner or operator by modification according to 40 CFR §144.41(d), if the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Director.

C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

D. CONFIDENTIALITY

In accordance with 40 CFR Part 2 and §144.5, any information submitted to EPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- 1) The name and address of the permittee;
- 2) Information which deals with the existence, absence or level of contaminants in drinking water.

E. DUTIES AND REQUIREMENTS

1. Duty to Comply. The permittee shall comply with all applicable UIC Program regulations and conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit issued in accordance with 40 CFR §144.34. Any permit noncompliance constitutes a violation of the SDWA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. Such non-compliance may also be grounds for enforcement action under RCRA.

- (2) Issue a notice of intent to deny the new permit. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;
 - (3) Issue a new permit under 40 CFR Part 124 with appropriate conditions; or
 - (4) Take other actions authorized by Underground Injection Control regulations.
- (e) State Continuation. An EPA issued permit does not continue in force beyond its expiration date under Federal law if at that time a State has primary enforcement authority. A State authorized to administer the UIC program may continue either EPA or State-issued permits until the effective date of the new permits, if State law allows. Otherwise, the facility or activity is operating without a permit from the time of expiration of the old permit to the effective date of the State-issued new permit.
- 4. Need to Halt or Reduce Activity not a Defense. It shall not be a defense, for permittee in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
 - 5. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.
 - 6. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

- (c) The permittee shall retain records concerning the nature and composition of all injected fluids until three years after the completion of plugging and abandonment which has been carried out in accordance with the attached plugging and abandonment plan, and is consistent with 40 CFR §146.10.
 - (d) The permittee shall continue to retain such records after the retention period specified by paragraphs (a) to (c) above, unless he delivers the records to the Director or obtains written approval from the Director to discard the records.
 - (e) Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurements;
 - (2) The individual(s) who performed the sampling or measurements;
 - (3) A precise description of both sampling methodology and the handling (custody) of samples;
 - (4) The date(s) analyses were performed;
 - (5) The names of individual(s) who performed the analyses;
 - (6) The analytical techniques or methods used; and
 - (7) The results of such analyses.
10. Monitoring. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Monitoring results shall be reported at the intervals specified in Part I of this permit.
11. Signatory Requirements.
- (a) All reports or other information, required to be submitted by this permit or requested by the Director, shall be signed and certified in accordance with 40 CFR §144.32, as follows:

new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

- (d) Any person signing a document under paragraphs 11(a) or 11(b) of this Section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

12. Reporting Requirements.

- (a) Planned Changes. The permittee shall give written notice to the Director, as soon as possible, of any planned physical alterations or additions to the permitted facility.
- (b) Anticipated Noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 30 days following each schedule date.
- (d) Twenty-four Hour Reporting.
- (1) The permittee shall report to the Director any non-compliance which may endanger health or the environment. Any information shall be provided orally

2. Plugging and Abandonment. The permittee shall plug and abandon the well consistent with 40 CFR § 146.10, as provided for in the plugging and abandonment plan incorporated as a part of this permit. Plugging and abandonment shall be completed to ensure that fluids are not allowed to move either into a USDW or from one USDW to another.

Revisions to the Plugging and Abandonment Plan must be submitted to the Director no less than 45 days prior to plugging and abandonment. The Director must approve the revisions prior to the start of plugging operations.

Within 60 days after plugging a well, or at the time of the next quarterly report (whichever is shorter), the permittee shall submit a report to the Director which includes all supporting documentation such as logs and test results. The report shall be certified as accurate by the person who performed the plugging operation, and shall consist of either:

- (a) A statement that the well was plugged in accordance with the plan previously submitted to the Director; or
 - (b) If the actual plugging differed from the approved plan, a statement defining the actual plugging and why the Director should approve such deviation. Any deviation from a previously approved plan may be cause for the Director to require the operator to replug the well.
3. Inactive Wells. After a cessation of injection for two years the permittee shall plug and abandon the well in accordance with the plan unless he:
- (a) Provided notice to the Director including a demonstration that the well will be used in the future; and
 - (b) Described actions or procedures, which are deemed satisfactory by the Director, that the permittee will take to ensure that the well will not endanger USDWs during the period of temporary abandonment. These actions and procedures shall include compliance with the technical requirements applicable to active injection wells unless waived, in writing, by the Director.

H. FINANCIAL RESPONSIBILITY

1. Financial Responsibility. The permittee shall maintain continuous compliance with the requirement to maintain financial responsibility and resources to close, plug, and abandon the underground injection well(s). The permittee shall not substitute an alternative demonstration of financial responsibility from that which the Director has approved, unless he has previously submitted evidence of that alternative demonstration to the Director and the Director notifies him that the alternative demonstration of financial responsibility is acceptable. The Director may, on a periodic basis, require the holder of a permit to revise the estimate of the resources needed to plug and abandon the well to reflect inflation of such costs and a revised demonstration of financial responsibility, if necessary.
2. Insolvency. In the event of:
 - (a) the bankruptcy of the trustee or issuing institution of the financial mechanism, or
 - (b) suspension or revocation of the authority of the trustee institution to act as trustee, or
 - (c) the institution issuing the financial mechanism loses its authority to issue such an instrument, the permittee must notify the Director, within ten (10) business days. The owner or operator must establish other financial assurance or liability coverage acceptable to the Director, within 60 days after such an event.

An owner or operator must also notify the Director by certified mail of the commencement of voluntary OR INVOLUNTARY proceedings under Title 11 (Bankruptcy), U.S. Code naming the owner or operator as debtor, within 10 business days after the commencement of the proceeding. A guarantor of a corporate guarantee must make such a notification if he is named as debtor, as required under the terms of the guarantee.

I. DEFINITIONS

All terms used in this permit, if not specifically defined in the permit, are defined at 40 C.F.R. Parts 144, 145, 146 and 147.

Part III
Special Conditions

Section A. Construction Requirements

Within ninety (90) days after the effective date of this permit the permittee is required to complete operations for placing additional cement outside the 4 1/2" casing. This operation will involve placing a continuous sheath of cement outside the 4 1/2" casing from a depth corresponding to the existing top of cement back to the surface.

As an alternative to placing additional cement behind the 4 1/2" casing the permittee may complete the well with tubing set on a packer. The packer must be set no higher than 100' above the top perforation.

The work performed under either option must be witnessed by an EPA representative.

In the event the well is recompleted with tubing and packer the following provisions apply:

1. Tubing and Packer

Injection may only take place through tubing with a packer set within the casing no higher than 100' feet above the top perforation. The tubing and packer shall be maintained in a manner which is compatible with the injection operation specified in Part I, Section B, and to prevent the movement of fluids into or between underground sources of drinking water.

2. Annulus Operation

The annulus between the tubing and the long-string casing shall be filled with lease water or other fluid as approved by the Director. The annulus pressure shall be maintained at 0 psig.

The annulus shall be monitored with a gauge designed to indicate both a vacuum (below atmospheric) and positive pressure (above atmospheric). The permittees shall comply with Part I, Section B, item 2 when a change in the annulus pressure of 15 psig occurs. The permittee shall provide an explanation to the Director for the change in pressure and measures that will be taken to restore annulus pressure to achieve compliance with this section. If the cause of annulus pressure change is not corrected within 48 hours, the permittee shall cease injection unless such order to cease operation is waived by the Director.

3. Injection Operation Monitoring

The annulus pressure (psig) measured at the wellhead will be monitored on a weekly basis along with the parameters specified in Part I, Section C, item 2.

4. Plugging and Abandonment

The tubing and packer will be removed from the well prior to the placement of cement as described in Part I, Section E.

Section B. Mechanical Integrity

An internal pressure test on the 4 1/2" casing will be required within ten (10) days of completion of the work performed in compliance with Part III, Section A. This test will require setting a packer or mechanical plug to a depth no higher than 100' above the top perforation and pressuring the casing to at least 300 psi with less than a 3 percent pressure loss in 30 minutes. This test must be witnessed by an EPA representative. Subsequent demonstrations of mechanical integrity will be made no later than two years from the date of the last approved demonstration. If the well is completed with tubing and packer, this demonstration will be made no later than five years from the date of the last approved demonstration.

Polu Kai Services, LLC137 North Washington Street, Suite 301
Falls Church, VA 22046
VA (703) 533-0039
KY (859) 771-5687**ROUTINE
INSPECTION
NOTICE**

KY 1530268

U.S. EPARegion IV
61 Forsyth St. S.W.
Atlanta, GA 30303
(404) 562-9424**REASON FOR INSPECTION**

The purpose of inspection by the duly designated representative of the Administrator is to gather data to determine if the person, or person in charge of such, subject to the underground injection control program has acted or is acting in compliance with Section 1445 of the SDWA 42 U.S.C. §300J-4(b). See reverse for quotes of Section 1445 of the SDWA 42 U.S.C. §300J-4(b)(1) and §300J-4(c).

| | | | |
|--------------|-------------------|---------------------|---------------|
| OPERATOR | Loeb & Steinwachs | EPA ID NUMBER | 1530268 |
| CONTACT NAME | | LEASE NAME / WELL # | Tom Howard Co |
| ADDRESS | | EPA PERMIT NUMBER | KY10230 |
| | | STATE PERMIT NUMBER | 9334 |
| PHONE NUMBER | | DOW NUMBER | 1530116 |

INFORMATION ON TANK Platinum Minerals**WELL LOCATION**

| | | | |
|--------|----------|---------------|-----------|
| STATE | KY | LATITUDE N | 37.81924 |
| COUNTY | Magoffin | LONGITUDE W | -83.02691 |
| | | ELEVATION GPS | 1050' |

WELL COMPLETION

| | | | | | | | | | | | | |
|------------|---|---|-----------------|------------------------------|--|-----------------|---|-----------------------------|-------------|-------|-------------|-------|
| CLASS WELL | 2 | 5 | CASING INJECTOR | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> | TUBING & PACKER | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> | CASING SIZE | 4 1/2 | TUBING SIZE | 2 3/8 |
|------------|---|---|-----------------|------------------------------|--|-----------------|---|-----------------------------|-------------|-------|-------------|-------|

OPERATIONAL DATA

| | | | | | | | | | | | | |
|----------------|----------|------------|----|-------------|-----|----------|----|--------------|---|-----------------------------|---------------|-----|
| AC | SI | TA | AB | PA | CP | UC | NC | DE | AN | UK | | |
| INJECTED FLUID | Produced | TUBING PSI | 0 | ANNULUS PSI | N/A | PUMP PSI | 0 | OPEN ANNULUS | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> | ANNULUS FLUID | N/A |

GENERAL SURFACE CONDITION OF WELL SITE: Good

ADVERSE FINDINGS / PROBLEMS / INCIDENTS ENCOUNTERED/WHO NOTIFIED? DESCRIBE:

plugged Annulus**PERSONS ENCOUNTERED:**

| | | | |
|-------|---------------|--------|--------|
| NAME: | CONTACT INFO: | PHONE: | EMAIL: |
| NAME: | CONTACT INFO: | PHONE: | EMAIL: |
| NAME: | CONTACT INFO: | PHONE: | EMAIL: |

PHOTO #1 INJECTION WELL / FOCUS OR REFERNECE WELL) : DESCRIPTION

PHOTO #2 (TANK BATTERY), DESCRIPTION: NiceGPS LOCATION 37.81815
-83.02968

PHOTO #3 DESCRIPTION

GPS LOCATION

PHOTO #4 DESCRIPTION

GPS LOCATION

ADDITIONAL PHOTOS WITH DESCRIPTION AND GPS LOCATION:

OPERATOR REPRESENTATIVENAME
SIGNATURE
ADDRESS
PHONE

DATE

UIC INSPECTOR (Polu Kai Services, LLC)

NAME

SIGNATURE

DATE

3.13.14



United States Environmental Protection Agency
Washington, DC 20460

ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

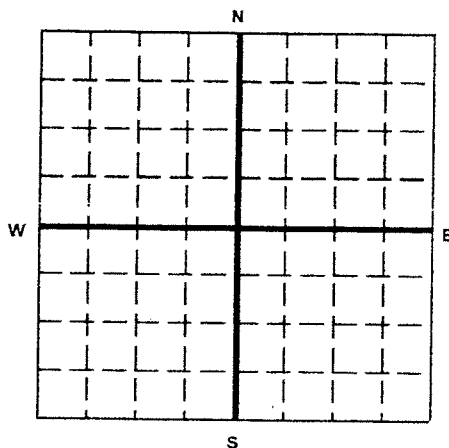
Name and Address of Existing Permittee

Lobe & Steinwasch
P.O. Box 524
Lawrenceville Ill 62439

Name and Address of Surface Owner

Tim Tackett
843 Twin Lick
Sellersville Ky 41465

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Kentucky

County

Magoffin

Permit Number

Surface Location Description

1/4 of 1/4 of 1/4 of 1/4 of Section Township Range

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface 2-P-78 ELV 1064

Location ft. from (N/S) Line of quarter section FSL 925

and ft. from (E/W) Line of quarter section FWL 1875

WELL ACTIVITY

TYPE OF PERMIT

☐ Brine Disposal

☐ Individual

☒ Enhanced Recovery

☐ Area

☐ Hydrocarbon Storage

Number of Wells

Lease Name Tom Howard

Well Number W6-W7-W8

multiple wells?

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING - CASING ANNULUS PRESSURE
(OPTIONAL MONITORING)

| MONTH | YEAR | AVERAGE PSIG | MAXIMUM PSIG | BBL | MCF | MINIMUM PSIG | MAXIMUM PSIG |
|-------|------|--------------|--------------|-----|-----|--------------|--------------|
| 1 | 2011 | 100 | 100 | 120 | | | |
| 2 | 2011 | 100 | 100 | 100 | | | |
| 3 | 2011 | 100 | 100 | 120 | | | |
| 4 | 2011 | 100 | 100 | 120 | | | |
| 5 | 2011 | 100 | 100 | 125 | | | |
| 6 | 2011 | 100 | 100 | 120 | | | |
| 7 | 2011 | 100 | 100 | 120 | | | |
| 8 | 2011 | 100 | 100 | 120 | | | |
| 9 | 2011 | 100 | 100 | 120 | | | |
| 10 | 2011 | 100 | 100 | 115 | | | |
| 11 | 2011 | 100 | 100 | 125 | | | |
| 12 | 2011 | 100 | 100 | 120 | | | |

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title (Please type or print)

Darrin Howard V.P.

Signature

Darrin Howard

Date Signed

01-31-2012

1530268
3.24.12

4

Polu Kai Services, LLC
137 North Washington Street, Suite 301
Falls Church, VA 22046
VA (703) 533-0039
KY (859) 771-5687

**ROUTINE
INSPECTION
NOTICE**

U.S. EPA
Region IV
61 Forsyth St. S.W.
Atlanta, GA 30303
(404) 562-9424

REASON FOR INSPECTION

The purpose of inspection by the duly designated representative of the Administrator is to gather data to determine if the person, or person in charge of such, subject to the underground injection control program has acted or is acting in compliance with Section 1445 of the SDWA 42 U.S.C. §300J-4(b)(1) and §300J-4(c).

| | | | |
|--------------|-------------------|---------------------|--------------|
| OPERATOR | Loeb & Sternwachs | EPA ID NUMBER | 1530268 |
| CONTACT NAME | | LEASE NAME / WELL # | Tom Howard 6 |
| ADDRESS | | EPA PERMIT NUMBER | KYI0230 |
| | | STATE PERMIT NUMBER | 9334 |
| PHONE NUMBER | | DOW NUMBER | |

INFORMATION ON TANK

WELL LOCATION

| | | | |
|--------|----------|---------------|----------|
| STATE | KY | LATITUDE N | 37.81924 |
| COUNTY | Magoffin | LONGITUDE W | 83.02691 |
| | | ELEVATION GPS | 990' |

WELL COMPLETION

| | | | | | | | | |
|------------------|-----------------|---|-----------------|---|-------------|-------|-------------|-------|
| CLASS WELL (2) 5 | CASING INJECTOR | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> | TUBING & PACKER | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> | CASING SIZE | 4 1/2 | TUBING SIZE | 2 3/8 |
|------------------|-----------------|---|-----------------|---|-------------|-------|-------------|-------|

OPERATIONAL DATA

| | | | | | | | | | | | |
|----------------|----------|------------|--------------------------|-------------|-----|----------|--------------------------|--------------|---|---------------|-----|
| (AC) | SI | TA | AB | PA | CP | UC | NC | DE | AN | UK | |
| INJECTED FLUID | Produced | TUBING PSI | <input type="checkbox"/> | ANNULUS PSI | N/A | PUMP PSI | <input type="checkbox"/> | OPEN ANNULUS | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> | ANNULUS FLUID | N/A |

GENERAL SURFACE CONDITION OF WELL SITE: Good

ADVERSE FINDINGS / PROBLEMS / INCIDENTS ENCOUNTERED/WHO NOTIFIED? DESCRIBE:

New owner Platinum Minerals 606-424-3899 Henrey Lyons Box 361
Salyersville Ky 41465

PERSONS ENCOUNTERED:

| | | | |
|-------|---------------|--------|--------|
| NAME: | CONTACT INFO: | PHONE: | EMAIL: |
| NAME: | CONTACT INFO: | PHONE: | EMAIL: |
| NAME: | CONTACT INFO: | PHONE: | EMAIL: |

PHOTO #1 INJECTION WELL / FOCUS OR REFERNECE WELL) : DESCRIPTION

PHOTO #2 (TANK BATTERY), DESCRIPTION: GPS LOCATION

Pumphouse

PHOTO #3 DESCRIPTION GPS LOCATION

PHOTO #4 DESCRIPTION GPS LOCATION

ADDITIONAL PHOTOS WITH DESCRIPTION AND GPS LOCATION:

| | | | |
|-------------------------|--|--|----------------|
| OPERATOR REPRESENTATIVE | | UIC INSPECTOR (Polu Kai Services, LLC) | |
| NAME | | NAME | |
| SIGNATURE | | SIGNATURE | C. [Signature] |
| ADDRESS | | DATE | 7.25.12 |
| PHONE | | | |

MECHANICAL INTEGRITY TEST INSPECTION FORM

U. S. Environmental Protection Agency (EPA)

Underground Injection Control (UIC) Program

Field Representative, Senior Executive Employee (SEE) Inspector

Company Name: Platinum Minerals Contact Person: Tim Howard
 Address: P O Box 361 City: Salersville State: Ky
 Zip: 41465 Phone Number: (606) 349-3960

WELL DESCRIPTION/LOCATION

EPA ID No.: KYS1530268 EPA Permit No.: KY20230 Rule-Auth? Y/N
 Lease Name: Tim Howard Well No.: 6-W State Permit No.:
 DOW Tank Battery Registration No.: Name on Tank Battery:
 GPS Longitude: W 83.82676° GPS Latitude: N 37.81911°
 Carter Coordinates: 2 P 78 FNL/SL 975 (FT) FEL/FVL 1875 (FT)

WELL COMPLETION

| | | |
|--|------------------------------|------------------------------|
| Class: II <input checked="" type="checkbox"/> V <input type="checkbox"/> | TOTAL DEPTH <u>1100</u> (FT) | SURFACE ELEVATION _____ (FT) |
|--|------------------------------|------------------------------|

Injection Type: Gravity ☐ Pump ☒ casing injector? Y/N tubing & packer? ☒

| CASING STRING | CASING DIAMETER | CEMENT SHOE DEPTH | CEMENT VOLUME (SACKS/TYPE) | TOP OF CEMENT |
|---------------|-----------------|-------------------|----------------------------|---------------|
| SURFACE | | | | |
| INTERMEDIATE | | | | |
| PRODUCTION | <u>4 1/2"</u> | | | |
| TUBING | <u>2 3/8"</u> | | | |

TOP OF CEMENT CALCULATED FROM: RECORDS _____ CEMENT BOND LOG _____ REMEDIAL _____

| | | | |
|--------------|---------------|---------------------|-------------|
| PACKER TYPE | <u>Larkin</u> | INJECTION FORMATION | |
| PACKER DEPTH | <u>980'</u> | FORMATION NAME | <u>Weir</u> |
| PERFORATIONS | | TOP ELEVATION | |

OPERATIONAL DATA

WELL STATUS: AC [Active (AC), Temporarily abandoned (TA), Shut-In (SI), Plugged & Abandoned (PA), Abandoned (AB), Plugged and abandoned without EPA approval (AN), Under Construction (UC), Not Constructed (NC), Converted to Production (CP)]

Connected? ☒ Injecting? ☒

Injected Fluid: freshwater? ☐ salt water? ☒ combination? ☐ annular fluid: _____

injection rate (bbl/day) 10 injection Pressure (psi) 100 is annulus open? Y/N

tubing PSI _____ annulus PSI _____ pump PSI _____

ANNULAR PRESSURE TEST:

| INITIAL TEST PRESSURE (PSI) | FINAL TEST PRESSURE (PSI) | PRESSURE CHANGE (+/- PSI) | LENGTH OF TEST |
|--------------------------------|------------------------------|------------------------------|----------------|
| 308 | 305 | -3 | 30 minutes |
| | | | |

Comments/Findings:

p/08c

RECEIPT OF THIS NOTICE IS HEREBY ACKNOWLEDGED:

SIGNATURES

Operator Representative: Quinn R. Howard SEE Inspector: SL [Signature]INSPECTION DATE: 3/29/12 45153 0268

Polu Kai Services, LLC
137 North Washington Street, Suite 301
Falls Church, VA 22046
VA (703) 533-0039
KY (859) 771-5687

**ROUTINE
INSPECTION
NOTICE**

1530268
4.10.07
U.S. EPA
Region IV
61 Forsyth St. S.W.
Atlanta, GA 30303
(404) 562-9424

6

REASON FOR INSPECTION

The purpose of inspection by the duly designated representative of the Administrator is to gather data to determine if the person, or person in charge of such, subject to the underground injection control program has acted or is acting in compliance with Section 1445 of the SDWA 42 U.S.C. §300J-4(b). See reverse for quotes of Section 1445 of the SDWA 42 U.S.C. §300J-4(b)(1) and §300J-4(c).

| | | | |
|--------------|-------------------|---------------------|----------------|
| OPERATOR | Loeb & Steinwachs | EPA ID NUMBER | 1530268 |
| CONTACT NAME | | LEASE NAME / WELL # | Tom Howard 6-W |
| ADDRESS | | EPA PERMIT NUMBER | KY10230 |
| | | STATE PERMIT NUMBER | 9334 |
| PHONE NUMBER | | DOW NUMBER | 1530116 |

INFORMATION ON TANK Loeb & Stein

WELL LOCATION

| | | | |
|--------|----------|---------------|----------|
| STATE | KY | LATITUDE N | 37.81934 |
| COUNTY | Magoffin | LONGITUDE W - | 83.02692 |
| | | ELEVATION GPS | 1116' |

WELL COMPLETION

| | | | | | | | | | |
|------------|---|-----------------|---|-----------------|---|-------------|-------|-------------|-------|
| CLASS WELL | 2 | CASING INJECTOR | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> | TUBING & PACKER | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> | CASING SIZE | 4 1/2 | TUBING SIZE | 2 3/8 |
|------------|---|-----------------|---|-----------------|---|-------------|-------|-------------|-------|

OPERATIONAL DATA

| | | | | | | | | | | |
|----------------|------|------------|--------------------------|-------------|--------------------------|----------|--------------------------|--|---------------|-----|
| AC | SI | TA | AB | PA | CP | UC | NC | DE | AN | UK |
| INJECTED FLUID | NONE | TUBING PSI | <input type="checkbox"/> | ANNULUS PSI | <input type="checkbox"/> | PUMP PSI | <input type="checkbox"/> | OPEN ANNULUS YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> | ANNULUS FLUID | N/A |

GENERAL SURFACE CONDITION OF WELL SITE: Good

ADVERSE FINDINGS / PROBLEMS / INCIDENTS ENCOUNTERED/WHO NOTIFIED? DESCRIBE:

Value open well

PERSONS ENCOUNTERED:

| | | | |
|-------|---------------|--------|--------|
| NAME: | CONTACT INFO: | PHONE: | EMAIL: |
| NAME: | CONTACT INFO: | PHONE: | EMAIL: |
| NAME: | CONTACT INFO: | PHONE: | EMAIL: |

PHOTO #1 INJECTION WELL / FOCUS OR REFERNECE WELL) : DESCRIPTION

PHOTO #2 (TANK BATTERY), DESCRIPTION: GPS LOCATION

PHOTO #3 DESCRIPTION GPS LOCATION

PHOTO #4 DESCRIPTION GPS LOCATION

ADDITIONAL PHOTOS WITH DESCRIPTION AND GPS LOCATION:

OPERATOR REPRESENTATIVE

NAME
SIGNATURE
ADDRESS
PHONE

DATE

UIC INSPECTOR (Polu Kai Services, LLC)

NAME
SIGNATURE
DATE

C. W. [Signature]
3.25.10

Kys 1530270 7

U. S. ENVIRONMENTAL PROTECTION AGENCY
UNDERGROUND INJECTION CONTROL PERMIT
AUTHORIZATION TO OPERATE A CLASS II INJECTION WELL
EPA UIC PERMIT NUMBER KYI0231

Pursuant to the Underground Injection Control regulations of the U.S. Environmental Protection Agency codified at Title 40 of the Code of Federal Regulations, Parts 124, 144, 146 and 147,

Loeb & Steinwachs
P. O. Box 524
Lawrenceville, IL 62439

is hereby authorized to operate and plug and abandon the following existing Class II enhanced recovery injection well:

Tom Howard No. 8W
Oil Springs Field
Magoffin County, Kentucky

Carter Coordinate 9-P-78, 265' FNL x 660' FWL

This authorization is in accordance with the limitations, monitoring requirements and other conditions set forth herein. This permit consists of this cover sheet; Part I, 5 pages; Part II, 13 pages; and Part III, 2 pages.

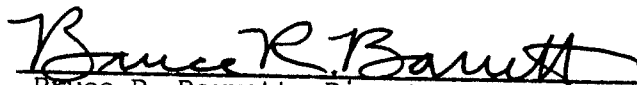
All references to Title 40 of the Code of Federal Regulations are to regulations that are in effect on the date that this permit becomes effective.

This permit shall become effective on JUN 19 1983.

This permit and the authorization to inject shall remain in full force and effect during the operating life of the well, unless this permit is otherwise modified, revoked and reissued, terminated, or a minor modification is made as provided at 40 C.F.R. §§144.39, 144.40 and 144.41. This permit shall be reviewed at least once every five years from the effective date.

JUN 19 1983

Date



Bruce R. Barrett, Director
Water Management Division
U.S. Environmental Protection Agency
Region IV

PART I

WELL SPECIFIC CONDITIONS

SECTION A. CONSTRUCTION REQUIREMENTS

Casing and Cementing

The permittee shall maintain casing and cement in the well to prevent the movement of fluids into or between underground sources of drinking water. In addition, the permittee shall be required to perform the work set forth in Part III, Section A.

SECTION B. OPERATING REQUIREMENTS

1. Injection Operation

Beginning on the effective date and lasting through the term of this permit, the permittee is authorized to inject only fluids brought to the surface in connection with conventional oil and natural gas production from the permittee's operations in the Oil Springs Field for enhanced recovery operations under the following conditions:

(a) Injection Zone

Injection shall be limited to the Weir Sand in the perforated interval between 985 feet and 1011 feet below land surface.

(b) Injection Pressure Limitation

- (i) Maximum injection pressure, measured at the wellhead, shall not exceed 200 psig.
- (ii) Injection at a pressure which initiates or propagates fractures in the confining zone or causes the movement of injection or formation fluids into an underground source of drinking water is prohibited.
- (iii) Injection between the outermost casing protecting underground sources of drinking water and the well bore is prohibited.

2. Loss of Mechanical Integrity During Operation

The permittee shall cease injection if a loss of mechanical integrity as defined at 40 C.F.R. §146.8 becomes evident during operation. Operation shall not be resumed until the permittee has complied with the provisions of Part II, Section G, of this permit regarding mechanical integrity demonstration and testing.

The permittee shall notify the Director of the loss of mechanical integrity in accordance with the reporting procedures in Part II, Section E, item 12(d).

SECTION C. MONITORING REQUIREMENTS

1. Sampling and Analysis Methods

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Grab samples shall be used for the laboratory analysis of the physical and chemical characteristics as specified in Part I, Section C, item 3(a). Test methods and procedures shall be as specified at 40 C.F.R. §136.3 or 40 C.F.R. Part 261, Appendix III. When the analytical method for a particular parameter is not specified at either 40 C.F.R. §136.3 or 40 C.F.R. Part 261, Appendix III, the permittee must obtain the Director's approval of the method used. The permittee shall identify the types of tests and methods used to generate all monitoring data. Reports to be generated from monitoring data are specified in Part I, Section D.

2. Injection Operation Monitoring

The permittee shall monitor the operation of the injection well as follows:

| <u>Parameter</u> | <u>Monitoring Frequency</u> |
|--|-----------------------------|
| Injection Pressure (psig) at Wellhead | Weekly |
| Flow Rate (barrels/day) of Injected Fluid | Weekly |

Cumulative Volume (barrels)
of Injected Fluid

Weekly

Observation and recording of injection pressure, flow rate, and cumulative volume shall be made over equal time intervals beginning on the date on which the well commences operation. Recordings shall be of representative values.

3. Injection Fluid Analysis

The permittee shall conduct an injection fluid analysis at least once every twelve months and whenever changes are made to the injection fluid. Analyses shall be made beginning within twelve months from the effective date of this permit, or twelve months from the most recent analysis, whichever is later. An analysis must include:

- (a) pH, total dissolved solids, and specific gravity; and
- (b) a list of all chemicals and their composition used for any well stimulation and fracturing during that sampling year; and a list of any additives used and their chemical composition, including any inhibitors used to prevent scaling, corrosion, or bacterial growth. These lists should indicate the brand name of the product and the manufacturer.

On the written request of EPA, an injection fluid analysis shall include the following additional constituents: barium, calcium, total iron, magnesium, sodium, bicarbonate, carbonate, chloride, sulfate, carbon dioxide, dissolved oxygen, hydrogen sulfide, and purgeable aromatic hydrocarbons.

SECTION D. REPORTING REQUIREMENTS

1. Reports on Well Tests and Workovers

Within ninety (90) days after the completion of the activity, the permittee shall report to the Director the results of the following:

- (a) Mechanical integrity tests other than those specified in Part III; and
- (b) Any well workover, logging or other test data, other than those specified in Part III, revealing downhole conditions.

2. Reporting of Monitoring Results

Monitoring results, as specified in Part I, Section C, shall be reported each year on EPA Form 7520-11 and must be postmarked by the 28th day of the month following the first full year after the effective date of this permit.

Copies of the monitoring results required by Part I, and all other reports required by Part II, shall be submitted to the Director at the following address:

U. S. Environmental Protection Agency
Region IV, Water Management Division
Ground-Water Protection Branch
Underground Injection Control Section
345 Courtland Street, NE
Atlanta, Georgia 30365

3. Reporting of New Wells Drilled Within the AOR

Within ten (10) days after spud date, the permittee shall report to the Director by certified mail, return receipt requested, the construction plans for any new well within the AOR of the permitted facility that will penetrate the confining zone or injection zone. The permittee shall provide information on proposed construction (including location and quantities of cement), location and depth. This requirement applies to any construction activity regardless of ownership of the well.

If the construction of the new well will not protect USDWs from contamination, the Director may terminate the permit under 40 C.F.R. §144.40(a)(3) if he or she determines that continued injection may endanger human health or the environment.

SECTION E. PLUGGING AND ABANDONMENT PLAN

Plugging and abandonment of the permitted injection well shall be in accordance with Part II, Section F of this permit and 40 C.F.R. §146.10.

The plugging of this injection well shall be performed in the following general manner:

- 1) Kill well as necessary with lease water.
- 2) Run in hole with cement retainer on tubing and set + 50' above top perforation. Establish injection rate with fresh water. Squeeze injection perfs with 20 sacks Class "A" cement.

- 3) Stab out of retainer and place 20 sacks of cement on top of retainer.
- 4) Pull up to 700' and place a cement plug inside the 4 1/2" casing from 700'-500'. WOC.
- 5) Tag top of cement with tubing to verify placement and solidification.
- 6) Pull up to 50' and place a cement plug inside the 4 1/2" casing from 50' to 4' below ground surface.
- 7) Cut casing strings 4' below ground level, weld steel plate on top and restore site.

PART II
GENERAL PERMIT COMPLIANCE

A. EFFECT OF PERMIT

The permittee is allowed to engage in underground injection in accordance with the conditions of this permit. The permittee, authorized by this permit, shall not construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR Part 142 or may otherwise adversely affect the health of persons. Any underground injection activity not specifically authorized in this permit is prohibited. Compliance with this permit does not constitute a defense to any action brought under the SDWA, or any other common or statutory law or regulation. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Nothing in this permit shall be construed to relieve the permittee of any duties under applicable regulations.

B. PERMIT ACTIONS

1. Modification, Revocation, Reissuance and Termination. The Director may, for cause or upon request from the permittee, modify, revoke and reissue, or terminate this permit in accordance with 40 CFR §§ 144.12, 144.39, and 144.40, including but not limited to the following:

124.5,

- (a) Alterations. There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in this permit.
- (b) Information. The Director has received information which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance.

- (c) New regulations. The standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued.
- (d) Compliance schedules. The Director determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, or materials shortage or other events over which the permittee has little or no control and for which there is no reasonably available remedy.
- (e) Proposed transfer. The Director receives notification of a proposed transfer of the permit.
- (f) Noncompliance. Noncompliance by the permittee with any condition of the permit.
- (g) Relevant facts. The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time.
- (h) Endangerment. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.

Also, the permit is subject to minor modifications for cause as specified in 40 CFR §144.41. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the permittee does not stay the applicability or enforceability of any permit condition.

The submittal of an updated application may be required prior to the Director granting a request for permit modification.

2. Transfer of Permits. This permit is not transferable to any person except after notice to and approval by the Director, and in compliance with the requirements and conditions of 40 CFR §144.38.

The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Safe Drinking Water Act.

This permit may be transferred to a new owner or operator by modification according to 40 CFR §144.41(d), if the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Director.

C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

D. CONFIDENTIALITY

In accordance with 40 CFR Part 2 and §144.5, any information submitted to EPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- 1) The name and address of the permittee;
- 2) Information which deals with the existence, absence or level of contaminants in drinking water.

E. DUTIES AND REQUIREMENTS

1. Duty to Comply. The permittee shall comply with all applicable UIC Program regulations and conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit issued in accordance with 40 CFR §144.34. Any permit noncompliance constitutes a violation of the SDWA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. Such non-compliance may also be grounds for enforcement action under RCRA.

2. Penalties for Violations of Permit Conditions. Any person who violates a permit requirement is subject to civil penalties, fines, and other enforcement action under the SDWA and may be subject to such actions pursuant to RCRA. Any person who willfully violates permit conditions may be subject to criminal prosecution.

3. Continuation or Expiring Permits.

- (a) Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must submit a complete application for a new permit at least 180 days before this permit expires.
- (b) Permit Extensions. The conditions of an expired permit may continue in force in accordance with 5 U.S.C. 558(c) until the effective date of a new permit, if:
- (1) The permittee has submitted a timely application which is a complete application for a new permit; and
 - (2) The Director, through no fault of the permittee, does not issue a new permit with an effective date on or before the expiration date of the previous permit, and
 - (3) The new permit has not been denied, or if a denial has been appealed, final agency action has not occurred in accordance with 40 CFR §124.19(t)(1).
- (c) Effect. Permits continued under 5 U.S.C. 558(c) remain fully effective and enforceable.
- (d) Enforcement. When the permittee is not in compliance with the conditions of the expiring or expired permit the Director may choose to do any or all of the following:
- (1) Initiate enforcement action based upon the permit which has been continued;

- (2) Issue a notice of intent to deny the new permit. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;
 - (3) Issue a new permit under 40 CFR Part 124 with appropriate conditions; or
 - (4) Take other actions authorized by Underground Injection Control regulations.
- (e) State Continuation. An EPA issued permit does not continue in force beyond its expiration date under Federal law if at that time a State has primary enforcement authority. A State authorized to administer the UIC program may continue either EPA or State-issued permits until the effective date of the new permits, if State law allows. Otherwise, the facility or activity is operating without a permit from the time of expiration of the old permit to the effective date of the State-issued new permit.
- 4. Need to Halt or Reduce Activity not a Defense. It shall not be a defense, for permittee in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
 - 5. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.
 - 6. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

7. Duty to Provide Information. The permittee shall furnish to the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
8. Inspection and Entry. The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:
 - (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
 - (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - (d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by SDWA, any substances or parameters at any location.
9. Records.
 - (a) The permittee shall retain records and all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit for a period of at least five years from the date of the sample, measurement or report.
 - (b) The permittee shall maintain records of all data required to complete the permit application form for this permit and any supplemental information submitted under 40 CFR §144.31 for a period of at least five years from the date the application was signed. These periods may be extended by request of the Director at any time.

- (c) The permittee shall retain records concerning the nature and composition of all injected fluids until three years after the completion of plugging and abandonment which has been carried out in accordance with the attached plugging and abandonment plan, and is consistent with 40 CFR §146.10.
 - (d) The permittee shall continue to retain such records after the retention period specified by paragraphs (a) to (c) above, unless he delivers the records to the Director or obtains written approval from the Director to discard the records.
 - (e) Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurements;
 - (2) The individual(s) who performed the sampling or measurements;
 - (3) A precise description of both sampling methodology and the handling (custody) of samples;
 - (4) The date(s) analyses were performed;
 - (5) The names of individual(s) who performed the analyses;
 - (6) The analytical techniques or methods used; and
 - (7) The results of such analyses.
10. Monitoring. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Monitoring results shall be reported at the intervals specified in Part I of this permit.
11. Signatory Requirements.
- (a) All reports or other information, required to be submitted by this permit or requested by the Director, shall be signed and certified in accordance with 40 CFR §144.32, as follows:

- (1) For a corporation: by a responsible corporate officer. For the purpose of this permit, a responsible corporate officer means: (1) a president, secretary, treasurer or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy - or decision making functions for the corporation, or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding 25 million (in second-quarter 1980 dollars); if authority to sign documents has been assigned or delegated to the manager in accordance with corporation procedures. -
 - (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official; or
 - (4) A duly authorized representative.
- (b) A person is a duly authorized representative only if:
- (1) The authorization is made in writing by a person described above;
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
 - (3) The written authorization is submitted to the Director.
- (c) If an authorization under paragraph (b) above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a

new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

- (d) Any person signing a document under paragraphs 11(a) or 11(b) of this Section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

12. Reporting Requirements.

- (a) Planned Changes. The permittee shall give written notice to the Director, as soon as possible, of any planned physical alterations or additions to the permitted facility.
- (b) Anticipated Noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 30 days following each schedule date.
- (d) Twenty-four Hour Reporting.
- (1) The permittee shall report to the Director any non-compliance which may endanger health or the environment. Any information shall be provided orally

within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported orally within 24 hours:

- (i) Any monitoring or other information which indicates that any contaminant may cause an endangerment to an underground source of drinking water.
 - (ii) Any noncompliance with a permit condition, or malfunction of the injection system, which may cause fluid migration into or between underground sources of drinking water.
- (2) A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- (e) Other Non-Compliance. The permittee shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted. The reports shall contain the information listed in Part II, Section E, Item 12(d)(2) above.
- (f) Other Information. When the permittee becomes aware that he failed to submit any relevant facts in the permit application or submitted incorrect information in a permit application or in any report to the Director, the permittee shall submit such facts or information within 10 days.

F. PLUGGING AND ABANDONMENT

1. Notice of Plugging and Abandonment. The permittee shall notify the Director no later than 45 days before conversion or abandonment of the well. The Director may allow a shorter notice period upon written request.

2. Plugging and Abandonment. The permittee shall plug and abandon the well consistent with 40 CFR § 146.10, as provided for in the plugging and abandonment plan incorporated as a part of this permit. Plugging and abandonment shall be completed to ensure that fluids are not allowed to move either into a USDW or from one USDW to another.

Revisions to the Plugging and Abandonment Plan must be submitted to the Director no less than 45 days prior to plugging and abandonment. The Director must approve the revisions prior to the start of plugging operations.

Within 60 days after plugging a well, or at the time of the next quarterly report (whichever is shorter), the permittee shall submit a report to the Director which includes all supporting documentation such as logs and test results. The report shall be certified as accurate by the person who performed the plugging operation, and shall consist of either:

- (a) A statement that the well was plugged in accordance with the plan previously submitted to the Director; or
 - (b) If the actual plugging differed from the approved plan, a statement defining the actual plugging and why the Director should approve such deviation. Any deviation from a previously approved plan may be cause for the Director to require the operator to replug the well.
3. Inactive Wells. After a cessation of injection for two years the permittee shall plug and abandon the well in accordance with the plan unless he:
 - (a) Provided notice to the Director including a demonstration that the well will be used in the future; and
 - (b) Described actions or procedures, which are deemed satisfactory by the Director, that the permittee will take to ensure that the well will not endanger USDWs during the period of temporary abandonment. These actions and procedures shall include compliance with the technical requirements applicable to active injection wells unless waived, in writing, by the Director.

G. MECHANICAL INTEGRITY

1. Standards. All injection well(s) must have and maintain mechanical integrity consistent with 40 CFR §146.8.
2. Prohibition Without Demonstration. The permittee shall not commence or continue injection activity after the effective date of this permit unless the permittee has demonstrated that the well covered by this permit has mechanical integrity in accordance with 40 CFR §146.8 and the permittee has received written notice from the Director that such demonstration is satisfactory.
3. Subsequent Mechanical Integrity Demonstrations. A demonstration of mechanical integrity in accordance with 40 CFR §146.8 shall be made no later than five years from the date of the last approved demonstration. Mechanical integrity shall also be demonstrated any time the tubing is removed from the well, the packer is reset, or a loss of mechanical integrity becomes evident during operation. Furthermore, the Director may by written notice require the permittee to demonstrate mechanical integrity at any time. The permittee shall notify the Director of his intent to demonstrate mechanical integrity at least 30 days prior to such demonstration. The Director may allow a shorter time period if it would be sufficient to enable EPA to adequately respond. The permittee shall report the results of a mechanical integrity demonstration within 90 days after completion and in accordance with Part II, Section E, item 11.
4. Loss Of Mechanical Integrity. If the permittee or the Director finds that the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity as defined by 40 CFR §146.8 becomes evident during operation, the injection operation shall be halted immediately and shall not be resumed until the Director gives approval to recommence injection.
5. Test Methods to be Used for Mechanical Integrity Test (MIT). A plan for logging and testing the well for mechanical integrity shall be prepared and submitted for the Director's approval at least 60 days prior to each proposed MIT demonstration date. The Director may allow a shorter time period if it would be sufficient to enable EPA to adequately respond.

The plan shall propose logs and tests specified in 40 CFR §146.8 (as amended from time to time by EPA to include additional approved logs and tests, as published in the Federal Register). The plan shall also propose standards that will be used for evaluating the results of logging and testing. Mechanical integrity will be confirmed if the well logs and test data meet or exceed the standards approved as a result of the Director's review of the plan.

H. FINANCIAL RESPONSIBILITY

1. Financial Responsibility. The permittee shall maintain continuous compliance with the requirement to maintain financial responsibility and resources to close, plug, and abandon the underground injection well(s). The permittee shall not substitute an alternative demonstration of financial responsibility from that which the Director has approved, unless he has previously submitted evidence of that alternative demonstration to the Director and the Director notifies him that the alternative demonstration of financial responsibility is acceptable. The Director may, on a periodic basis, require the holder of a permit to revise the estimate of the resources needed to plug and abandon the well to reflect inflation of such costs and a revised demonstration of financial responsibility, if necessary.
2. Insolvency. In the event of:
 - (a) the bankruptcy of the trustee or issuing institution of the financial mechanism, or
 - (b) suspension or revocation of the authority of the trustee institution to act as trustee, or
 - (c) the institution issuing the financial mechanism loses its authority to issue such an instrument, the permittee must notify the Director, within ten (10) business days. The owner or operator must establish other financial assurance or liability coverage acceptable to the Director, within 60 days after such an event..

An owner or operator must also notify the Director by certified mail of the commencement of voluntary OR INVOLUNTARY proceedings under Title 11 (Bankruptcy), U.S. Code naming the owner or operator as debtor, within 10 business days after the commencement of the proceeding. A guarantor of a corporate guarantee must make such a notification if he is named as debtor, as required under the terms of the guarantee.

I. DEFINITIONS

All terms used in this permit, if not specifically defined in the permit, are defined at 40 C.F.R. Parts 144, 145, 146 and 147.

Part III
Special Conditions

Section A. Construction Requirements

Within ninety (90) days after the effective date of this permit the permittee is required to complete operations for placing additional cement outside the 4 1/2" casing. This operation will involve placing a continuous sheath of cement outside the 4 1/2" casing from a depth corresponding to the existing top of cement back to the surface.

As an alternative to placing additional cement behind the 4 1/2" casing the permittee may complete the well with tubing set on a packer. The packer must be set no higher than 100' above the top perforation.

The work performed under either option must be witnessed by an EPA representative.

In the event the well is recompleted with tubing and packer the following provisions apply:

1. Tubing and Packer

Injection may only take place through tubing with a packer set within the casing no higher than 100' feet above the top perforation. The tubing and packer shall be maintained in a manner which is compatible with the injection operation specified in Part I, Section B, and to prevent the movement of fluids into or between underground sources of drinking water.

2. Annulus Operation

The annulus between the tubing and the long-string casing shall be filled with lease water or other fluid as approved by the Director. The annulus pressure shall be maintained at 0 psig.

The annulus shall be monitored with a gauge designed to indicate both a vacuum (below atmospheric) and positive pressure (above atmospheric). The permittees shall comply with Part I, Section B, item 2 when a change in the annulus pressure of 15 psig occurs. The permittee shall provide an explanation to the Director for the change in pressure and measures that will be taken to restore annulus pressure to achieve compliance with this section. If the cause of annulus pressure change is not corrected within 48 hours, the permittee shall cease injection unless such order to cease operation is waived by the Director.

3. Injection Operation Monitoring

The annulus pressure (psig) measured at the wellhead will be monitored on a weekly basis along with the parameters specified in Part I, Section C, item 2.

4. Plugging and Abandonment

The tubing and packer will be removed from the well prior to the placement of cement as described in Part I, Section E.

Section B. Mechanical Integrity

An internal pressure test on the 4 1/2" casing will be required within ten (10) days of completion of the work performed in compliance with Part III, Section A. This test will require setting a packer or mechanical plug to a depth no higher than 100' above the top perforation and pressuring the casing to at least 300 psi with less than a 3 percent pressure loss in 30 minutes. This test must be witnessed by an EPA representative. Subsequent demonstrations of mechanical integrity will be made no later than two years from the date of the last approved demonstration. If the well is completed with tubing and packer, this demonstration will be made no later than five years from the date of the last approved demonstration.

WELL RECORD

OPERATOR: KENTUCKY NATIONAL OIL COMPANY, Oil Springs, Kentucky

LEASE NAME & WELL NO.: TOM HOWARD NO. 8W

PERMIT NO.: 20299

TYPE OF WELL: Secondary Recovery Input

LOCATION 265' FNL & 660' FWL, Section 9-P-78, Magoffin County, Kentucky

ELEVATION: Drilling Datum - 1038.4 ft., Top of the rig floor
Permanent Datum - 1037.9 ft., Top of the 4½" OD casing

DRILLING CONTRACTOR: Payne Rice, Oil Springs, Kentucky

DRILLING COMMENCED: Dec. 28, 1967
WELL COMPLETED: Feb. 19, 1968

DRILLING COMPLETED: Jan. 18, 1968
OPERATIONS COMMENCED: July 16, 1968

TOTAL DEPTH: 1155 feet

PLUG BACK DEPTH 1047 feet

CASING RECORD

Surface - 8 5/8" OD SH casing set in nine-inch hole on a shoe @ 8 feet on Dec. 28, 1967.

Water String - 7" OD, 17#, 8RT ST&C, Rge 2, H-40, SH smls. casing set in eight-inch hole on a shoe @ 600 feet on Jan. 6, 1968. The casing was pulled on Jan. 19, 1968.

Injection
Casing -

4½" OD, 9.50#, 8RT ST&C, Rge 2, J-55 new smls. - 33 jts. of casing set in 6½-inch hole @ 1065 feet on Jan. 22, 1968, and cemented with 108 sacks of Class A cement.

COMPLETION HORIZON AND INTERVAL: First Weir Sand 981 - 1013 feet

PERFORATIONS: 985' - 1011'; twenty-six (26) feet; with nine (9) 3½" OD, 15-gm., stick jets (0.47" entry hole), one shot every three feet; with intervals from 1006' - 1011'; five (5) feet; blanked; on January 26, 1968, by Allegheny Nuclear Surveys.

WELL RECORD (CONT'D) OPERATOR: KENTUCKY NATIONAL OIL COMPANY
ISE. NAME AND WELL NO.: TOM HOWARD NO. 8 W

STIMULATION TREATMENT: DOWELL riverfraced the First LWeir Sand; 981'-1013'; thirty-two (32) feet; in one stage down the 4½" OD casing through nine (9) jet perforations from 985'-1011'; twenty-six (26) feet, one show every three (3) feet; with 9,000 gallons of water with fluid loss additives and 18,000 lbs. of 20-40 mesh rounded sand for a sand concentration of 2.0 lb./gal. under a pressure from 1450-1550 psig. for a rate ranging 27.8-28.2 BPM and averaging 28.0 BPM on Feb. 14, 1968.

Frac treatment spearheaded with 250 gallons of Dowell's Super Mud Acid (15% HCl & 6% HF)

INITIAL INJECTIVITY: 23 BWPD @ 60 psig. on July 16, 1968.

GEOPHYSICAL LOG: Density-Gamma Ray Log by Allegheny Nuclear Surveys, On Jan. 18, 1968
Temperature Log by Allegheny Nuclear Surveys, On Jan. 18, 1968
Caliper Log by Allegheny Nuclear Surveys, On Jan. 18, 1968

REMARKS: The well was plugged back from the total depth, 1155 feet, with rock at 1067 feet.

SIGNED:

KENTUCKY NATIONAL OIL COMPANY

By Jeffry V. George
Jeffry V. George, Petroleum Engineer

WELL RECORD (CONT'D) OPERATOR: KENTUCKY NATIONAL OIL COMPANY
LSE. NAME & WELL NO.; Tom Howard No. 8 W

FORMATION RECORD

Depths are geophysical log measurements. This formation record has been generalized. For details refer to the geophysical log,

| FORMATION | DESCRIPTION AND/OR NAME | DEPTHS | REMARKS |
|-----------|--|-------------|--|
| Clay | | 0 - 6 | |
| Sand | | 6 - 33 | |
| Shale | | 33 - 85 | |
| Sand | | 85 - 115 | Shaley |
| Shale | | 115 - 176 | Base sandy |
| Sand | FIRST SALT | 176 - 405 | Fresh water - top shaly, shale streaks 307'-312' & 370'-375' |
| Shale | | 405 - 490 | Base sandy |
| Sand | SECOND SALT | 490 - 523 | Fresh water |
| Shale | | 523 - 556 | Sandy |
| LIME | LITTLE | 556 - 562 | |
| Shale | | 562 - 580 | |
| Lime | BIG | 580 - 624 | |
| Shale | PEA GREEN | 624 - 855 | |
| Sand | WEIR "A" | 855 - 894 | Gas show-shaly & broken |
| Shale | GRAY | 894 - 947 | Sandy |
| Sand | STRAY | 947 - 967 | Gas & oil show |
| Shale | | 967 - 981 | |
| Sand | FIRST WEIR | 981 - 1013 | Gas & oil show |
| Shale | | 1013 - 1022 | |
| Sand | SECOND WEIR | 1022 - 1041 | Gas show-top shaly |
| Shale | | 1041 - 1044 | Sandy |
| Sand | THIRD WEIR | 1044 - 1052 | Gas show |
| Shale | | 1052 - 1055 | Sandy |
| Shale | SUNBURY | 1055 - 1074 | |
| Sand | BEREA | 1074 - 1150 | Gas show 1074-1085 shaly & broken |
| Shale | | 1150 - 1155 | |
| | TOTAL DEPTH | 1155 | |
| | INITIAL PLUG BACK DEPTH (before setting of the 4½" OD casing) | 1067 | |
| | FINIAL BLUG BACK DEPTH (after setting of the 4½" OD casing) | 1047 | |

KY1530270

9

| | | | | | |
|--|----------|---|---|--|---|
| Polu Kai Services, LLC 137 North Washington Street, Suite 301 Falls Church, VA 22046 VA (703) 533-0039 KY (859) 771-5687 | | ROUTINE INSPECTION NOTICE | | U.S. EPA Region IV 61 Forsyth St. S.W. Atlanta, GA 30303 (404) 562-9424 | |
| REASON FOR INSPECTION The purpose of inspection by the duly designated representative of the Administrator is to gather data to determine if the person, or person in charge of such, subject to the underground injection control program has acted or is acting in compliance with Section 1445 of the SDWA 42 U.S.C. §300J-4(b). See reverse for quotes of Section 1445 of the SDWA 42 U.S.C. §300J-4(b)(1) and §300J-4(c). | | | | | |
| OPERATOR | | Leob & Steinwachs | | EPA ID NUMBER | |
| CONTACT NAME | | | | LEASE NAME / WELL # | |
| ADDRESS | | | | EPA PERMIT NUMBER | |
| | | | | STATE PERMIT NUMBER | |
| PHONE NUMBER | | | | DOW NUMBER | |
| INFORMATION ON TANK | | Platinum Minerals 606.349.3960 606.306.7566 | | | |
| WELL LOCATION | | | | | |
| STATE | | KY | | LATITUDE N | |
| COUNTY | | Magoffin | | LONGITUDE W | |
| | | | | ELEVATION GPS | |
| WELL COMPLETION | | | | | |
| CLASS WELL | 2 | CASING INJECTOR | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> | TUBING & PACKER | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> |
| | | CASING SIZE | 4 1/2 | TUBING SIZE | 2 3/8 |
| OPERATIONAL DATA | | | | | |
| AC | SI | TA | AB | PA | CP |
| UC | NC | DE | AN | UK | |
| INJECTED FLUID | produced | TUBING PSI | 0 | ANNULUS PSI | N/A |
| | | PUMP PSI | 0 | OPEN ANNULUS | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> |
| | | ANNULUS FLUID | N/A | | |
| GENERAL SURFACE CONDITION OF WELL SITE: Good | | | | | |
| ADVERSE FINDINGS / PROBLEMS / INCIDENTS ENCOUNTERED/WHO NOTIFIED? DESCRIBE: | | | | | |
| plugged annulus | | | | | |
| PERSONS ENCOUNTERED: | | | | | |
| NAME: | | CONTACT INFO: | | PHONE: | |
| NAME: | | CONTACT INFO: | | PHONE: | |
| NAME: | | CONTACT INFO: | | PHONE: | |
| PHOTO #1 INJECTION WELL / FOCUS OR REFERNECE WELL) : DESCRIPTION | | | | | |
| PHOTO #2 (TANK BATTERY), DESCRIPTION: Nice | | | | GPS LOCATION 37.81815 -83.02968 | |
| PHOTO #3 DESCRIPTION | | | | GPS LOCATION | |
| PHOTO #4 DESCRIPTION | | | | GPS LOCATION | |
| ADDITIONAL PHOTOS WITH DESCRIPTION AND GPS LOCATION: | | | | | |
| OPERATOR REPRESENTATIVE | | | UIC INSPECTOR (Polu Kai Services, LLC) | | |
| NAME | | | NAME | | |
| SIGNATURE | | | SIGNATURE | | |
| ADDRESS | | | DATE | | |
| PHONE | | | DATE | | |

MIT 3-25-12

Polu Kai Services, LLC
137 North Washington Street, Suite 301
Falls Church, VA 22046
VA (703) 533-0039
KY (859) 771-5687

**ROUTINE
INSPECTION
NOTICE**

U.S. EPA
Region IV
61 Forsyth St. S.W.
Atlanta, GA 30303
(404) 562-9424

REASON FOR INSPECTION

The purpose of inspection by the duly designated representative of the Administrator is to gather data to determine if the person, or person in charge of such, subject to the underground injection control program has acted or is acting in compliance with Section 1445 of the SDWA 42 U.S.C. §300J-4(b) and §300J-4(c). See reverse for quotes of Section 1445 of the SDWA 42 U.S.C. §300J-4(b)(1) and §300J-4(c).

| | | | |
|--------------|-------------------|---------------------|--------------|
| OPERATOR | Loeb & Steinwachs | EPA ID NUMBER | 1530270 |
| CONTACT NAME | | LEASE NAME / WELL # | Tom Howard 8 |
| ADDRESS | | EPA PERMIT NUMBER | KY10270 0231 |
| | | STATE PERMIT NUMBER | 20299 |
| PHONE NUMBER | | DOW NUMBER | |

INFORMATION ON TANK

WELL LOCATION

| | | | |
|--------|----------|---------------|----------|
| STATE | KY | LATITUDE N | 37.81612 |
| COUNTY | Megottin | LONGITUDE W | 83.03082 |
| | | ELEVATION GPS | 1039' |

WELL COMPLETION

| | | | | | | | | | |
|------------|-------|-----------------|---|-----------------|---|-------------|-------|-------------|-------|
| CLASS WELL | (2) 5 | CASING INJECTOR | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> | TUBING & PACKER | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> | CASING SIZE | 4 1/2 | TUBING SIZE | 2 3/8 |
|------------|-------|-----------------|---|-----------------|---|-------------|-------|-------------|-------|

OPERATIONAL DATA

| | | | | | | | | | | | |
|----------------|----------|------------|-----|-------------|-----|----------|----|--------------|---|---------------|-----|
| (AC) | SI | TA | AB | PA | CP | UC | NC | DE | AN | UK | |
| INJECTED FLUID | Produced | TUBING PSI | N/A | ANNULUS PSI | N/A | PUMP PSI | 0 | OPEN ANNULUS | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> | ANNULUS FLUID | N/A |

GENERAL SURFACE CONDITION OF WELL SITE: Good

ADVERSE FINDINGS / PROBLEMS / INCIDENTS ENCOUNTERED/WHO NOTIFIED? DESCRIBE:

New owner Platinum Minerals 606-424-3899

PERSONS ENCOUNTERED:

| | | | |
|--------------------|----------------------|--------|--------|
| NAME: Jimmy Howard | CONTACT INFO: Pumper | PHONE: | EMAIL: |
| NAME: | CONTACT INFO: | PHONE: | EMAIL: |
| NAME: | CONTACT INFO: | PHONE: | EMAIL: |

PHOTO #1 INJECTION WELL / FOCUS OR REFERNECE WELL) : DESCRIPTION

| | |
|---------------------------------------|-----------------------|
| PHOTO #2 (TANK-BATTERY), DESCRIPTION: | GPS LOCATION |
| Pumphouse | 37.81898 -83.02882 |

| | |
|----------------------|--------------|
| PHOTO #3 DESCRIPTION | GPS LOCATION |
|----------------------|--------------|

| | |
|----------------------|--------------|
| PHOTO #4 DESCRIPTION | GPS LOCATION |
|----------------------|--------------|

ADDITIONAL PHOTOS WITH DESCRIPTION AND GPS LOCATION:

| | | | |
|--------------------------------|---------|---|-------------------|
| OPERATOR REPRESENTATIVE | | UIC INSPECTOR (Polu Kai Services, LLC) | |
| NAME | | NAME | |
| SIGNATURE | 7.25.12 | SIGNATURE | C. W. [Signature] |
| ADDRESS | | DATE | |
| PHONE | | | |

Loeb & Stummach

MECHANICAL INTEGRITY TEST INSPECTION FORM

U. S. Environmental Protection Agency (EPA)
Underground Injection Control (UIC) Program
Field Representative, Senior Executive Employee (SEE) Inspector

Company Name: Platinum Minerals Contact Person: Jim Howard
Address: PO Box 361 City: Salysville State: Ky
Zip: 41465 Phone Number: (606) 349-3960

WELL DESCRIPTION/LOCATION

EPA ID No.: KYS1530270 EPA Permit No.: KYE0231 Rule-Auth? Y/N
Lease Name: Tom Howard Well No.: 8 State Permit No.:
DOW Tank Battery Registration No.: Name on Tank Battery:
GPS Longitude: W 83.03084° GPS Latitude: N 37.81612°
Carter Coordinates: 9 P 78 0/FSL 265 (FT) FEL/WL 660 (FT)

WELL COMPLETION

Class: II ☒ V ☐ TOTAL DEPTH 1047 (FT) SURFACE ELEVATION _____ (FT)

Injection Type: Gravity _____ Pump ☒ casing injector? Y/N tubing & packer? ☒

| CASING STRING | CASING DIAMETER | CEMENT SHOE DEPTH | CEMENT VOLUME (SACKS/TYPE) | TOP OF CEMENT |
|---------------|-----------------|-------------------|----------------------------|---------------|
| SURFACE | | | | |
| INTERMEDIATE | | | | |
| PRODUCTION | <u>4 1/2"</u> | <u>1065'</u> | <u>1085x A</u> | |
| TUBING | <u>2 3/8"</u> | | | |

TOP OF CEMENT CALCULATED FROM: RECORDS _____ CEMENT BOND LOG _____ REMEDIAL _____

| | | | |
|--------------|-------------------|---------------------|-------------|
| PACKER TYPE | <u>Baker</u> | INJECTION FORMATION | |
| PACKER DEPTH | <u>970'</u> | FORMATION NAME | <u>Weir</u> |
| PERFORATIONS | <u>985'-1011'</u> | TOP ELEVATION | |

OPERATIONAL DATA

WELL STATUS: AC [Active (AC), Temporarily abandoned (TA), Shut-In (SI), Plugged & Abandoned (PA), Abandoned (AB), Plugged and abandoned without EPA approval (AN), Under Construction (UC), Not Constructed (NC), Converted to Production (CP)]

Connected? ☒ N Injecting? ☒ N

Injected Fluid: freshwater? _____ salt water? ☒ combination? _____ annular fluid: _____

injection rate (hbl/day) 10, injection Pressure (psi) 100 is annulus open? Y/N

tubing PSI _____ annulus PSI _____ pump PSI _____

ANNULAR PRESSURE TEST:

| INITIAL TEST PRESSURE (PSI) | FINAL TEST PRESSURE (PSI) | PRESSURE CHANGE (+/- PSI) | LENGTH OF TEST |
|--------------------------------|------------------------------|------------------------------|----------------|
| 310 | 310 | - | 30 minutes |
| | | | |

Comments/Findings:

PIP 82

RECEIPT OF THIS NOTICE IS HEREBY ACKNOWLEDGED:

SIGNATURES

Operator Representative: Jimmy R. Howard SEE Inspector: [Signature]

INSPECTION DATE: 3/29/12 #YS1530270

MIT 12-5-07

| | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--------------------------|--|----------------------------|--|--------------------------|--|--------------|--|---|--|---------------|--|-----|--|
| Polu Kai Services, LLC 137 North Washington Street, Suite 301 Falls Church, VA 22046 VA (703) 533-0039 KY (859) 771-5687 | | ROUTINE INSPECTION NOTICE | | U.S. EPA Region IV 61 Forsyth St. S.W. Atlanta, GA 30303 (404) 562-9424 | | | | | | | | | | | | | | | | | | | |
| REASON FOR INSPECTION The purpose of inspection by the duly designated representative of the Administrator is to gather data to determine if the person, or person in charge of such, subject to the underground injection control program has acted or is acting in compliance with Section 1445 of the SDWA 42 U.S.C. §300J-4(b). See reverse for quotes of Section 1445 of the SDWA 42 U.S.C. §300J-4(b)(1) and §300J-4(c). | | | | | | | | | | | | | | | | | | | | | | | |
| OPERATOR | | Loeb & Steinwachs | | EPA ID NUMBER | | 1530270 | | | | | | | | | | | | | | | | | |
| CONTACT NAME | | | | LEASE NAME / WELL # | | Tom Howard 8-W | | | | | | | | | | | | | | | | | |
| ADDRESS | | | | EPA PERMIT NUMBER | | KYI0231 | | | | | | | | | | | | | | | | | |
| | | | | STATE PERMIT NUMBER | | 20299 | | | | | | | | | | | | | | | | | |
| PHONE NUMBER | | 606 349 3960 | | DOW NUMBER | | 1530116 | | | | | | | | | | | | | | | | | |
| INFORMATION ON TANK | | Loeb & Steinwachs | | | | | | | | | | | | | | | | | | | | | |
| WELL LOCATION | | | | | | | | | | | | | | | | | | | | | | | |
| STATE | | KY | | LATITUDE N | | 37.81604 | | | | | | | | | | | | | | | | | |
| COUNTY | | Magoffin | | LONGITUDE W | | 83.03078 | | | | | | | | | | | | | | | | | |
| | | | | ELEVATION GPS | | 1002 | | | | | | | | | | | | | | | | | |
| WELL COMPLETION | | | | | | | | | | | | | | | | | | | | | | | |
| CLASS WELL <input checked="" type="checkbox"/> 2.5 | | CASING INJECTOR | | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> | | TUBING & PACKER | | YES <input type="checkbox"/> NO <input type="checkbox"/> | | CASING SIZE | | 4 1/2 | | TUBING SIZE | | 2 3/8 | | | | | | | |
| OPERATIONAL DATA | | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> AC | | SI | | TA | | AB | | PA | | CP | | UC | | NC | | DE | | AN | | UK | | | |
| INJECTED FLUID | | NONE | | TUBING PSI | | <input type="checkbox"/> | | ANNULUS PSI | | <input type="checkbox"/> | | PUMP PSI | | <input type="checkbox"/> | | OPEN ANNULUS | | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> | | ANNULUS FLUID | | N/A | |
| GENERAL SURFACE CONDITION OF WELL SITE: | | | | | | Good | | | | | | | | | | | | | | | | | |
| ADVERSE FINDINGS / PROBLEMS / INCIDENTS ENCOUNTERED/WHO NOTIFIED? DESCRIBE: | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| PERSONS ENCOUNTERED: | | | | | | | | | | | | | | | | | | | | | | | |
| NAME: | | CONTACT INFO: | | PHONE: | | EMAIL: | | | | | | | | | | | | | | | | | |
| NAME: | | CONTACT INFO: | | PHONE: | | EMAIL: | | | | | | | | | | | | | | | | | |
| NAME: | | CONTACT INFO: | | PHONE: | | EMAIL: | | | | | | | | | | | | | | | | | |
| PHOTO #1 INJECTION WELL / FOCUS OR REFERNECE WELL) : DESCRIPTION | | | | | | | | | | | | | | | | | | | | | | | |
| PHOTO #2 (TANK BATTERY), DESCRIPTION: | | | | | | GPS LOCATION | | | | | | 37.81798 -83.02959 1018 | | | | | | | | | | | |
| PHOTO #3 DESCRIPTION | | | | | | GPS LOCATION | | | | | | | | | | | | | | | | | |
| PHOTO #4 DESCRIPTION | | | | | | GPS LOCATION | | | | | | | | | | | | | | | | | |
| ADDITIONAL PHOTOS WITH DESCRIPTION AND GPS LOCATION: | | | | | | | | | | | | | | | | | | | | | | | |
| OPERATOR REPRESENTATIVE | | | | | | UIC INSPECTOR (Polu Kai Services, LLC) | | | | | | | | | | | | | | | | | |
| NAME | | | | | | NAME | | | | | | | | | | | | | | | | | |
| SIGNATURE | | | | | | SIGNATURE | | | | | | C. [Signature] | | | | | | | | | | | |
| ADDRESS | | | | | | DATE | | | | | | 3.25.10 | | | | | | | | | | | |
| PHONE | | | | | | DATE | | | | | | | | | | | | | | | | | |



United States Environmental Protection Agency
Washington, DC 20460

ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

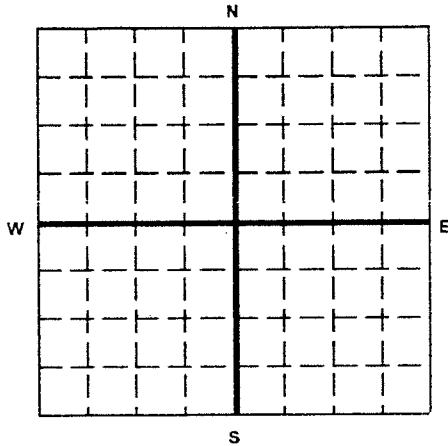
Name and Address of Existing Permittee

Lobe & Steinwachs
P.O. Box 524
Lawrenceville Ill 62439

Name and Address of Surface Owner

Tim Tackett
843 Twin Lick
Salversville Ky 41465

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Kentucky

County

Magoffin

Permit Number

Surface Location Description

1/4 of 1/4 of 1/4 of 1/4 of Section Township Range

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface 2-P-78

ELY 1064

Location ft. from (N/S) Line of quarter section

FSL 925

and ft. from (E/W) Line of quarter section.

FWL 1875

WELL ACTIVITY

TYPE OF PERMIT

☐ Brine Disposal

☐ Individual

☒ Enhanced Recovery

☐ Area

☐ Hydrocarbon Storage

Number of Wells

multiple?
wells.

Lease Name Tom Howard

Well Number W6-W7-W8

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING - CASING ANNULUS PRESSURE
(OPTIONAL MONITORING)

| MONTH | YEAR | AVERAGE PSIG | MAXIMUM PSIG | BBL | MCF | MINIMUM PSIG | MAXIMUM PSIG |
|-------|------|--------------|--------------|-----|-----|--------------|--------------|
| 1 | 2011 | 100 | 100 | 120 | | | |
| 2 | 2011 | 100 | 100 | 100 | | | |
| 3 | 2011 | 100 | 100 | 120 | | | |
| 4 | 2011 | 100 | 100 | 120 | | | |
| 5 | 2011 | 100 | 100 | 125 | | | |
| 6 | 2011 | 100 | 100 | 120 | | | |
| 7 | 2011 | 100 | 100 | 120 | | | |
| 8 | 2011 | 100 | 100 | 120 | | | |
| 9 | 2011 | 100 | 100 | 120 | | | |
| 10 | 2011 | 100 | 100 | 115 | | | |
| 11 | 2011 | 100 | 100 | 125 | | | |
| 12 | 2011 | 100 | 100 | 120 | | | |

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title (Please type or print)

Darrin Howard V.P.

Signature

Darrin Howard

Date Signed

01-31-2012



MINERAL LABS INC.

Box 549

Salyersville, Kentucky 41465

Phone (606)349-6145

Fax (606)349-6102

Certificate of Analysis

Platinum Minerals
P.O. Box 361
Salyersville, KY 41465

Date/Time Collected: 1/30/2012 0:01:00
Date/Time Received: 1/30/2012 16:12:00
Lab Number: 120000860

Permit Number:

Attention:
Test Type:
Site ID:
Location: Lobe & Steinwachs

| Parameter | Result | Units | Method | MRL | Date/Time/Tech Analyzed | | |
|------------------------|--------|-------|-------------------|------|-------------------------|-------|-----|
| pH | 6.06 | std | SM 18th 4500 H+-B | 0.01 | 1/30/12 | 16:20 | SRC |
| Specific Gravity | 1.10 | | ASTM D1429 | 0.04 | 1/31/12 | 9:25 | KS |
| Total Dissolved Solids | 108405 | mg/L | SM 18th 2540 C | 10 | 1/31/12 | 13:30 | SRC |

U.S. EPA REGION 4
GWD W/B
2012 FEB -2 A 11:53

* Taken on Site

NDP = No Data Provided

CLT = Client

ND = Not Detected

The analyses above are reported to the best of my knowledge and belief.

Submitted By:

Sharlonda Carroll

Sharlonda Carroll

Environmental Manager

Page Number: 1



120000860

Kys 1530269 11

U. S. ENVIRONMENTAL PROTECTION AGENCY
UNDERGROUND INJECTION CONTROL PERMIT
AUTHORIZATION TO OPERATE A CLASS II INJECTION WELL
EPA UIC PERMIT NUMBER KYI0229

Pursuant to the Underground Injection Control regulations of the U.S. Environmental Protection Agency codified at Title 40 of the Code of Federal Regulations, Parts 124, 144, 146 and 147,

Loeb & Steinwachs
P. O. Box 524
Lawrenceville, IL 62439

is hereby authorized to operate and plug and abandon the following existing Class II enhanced recovery injection well:

Tom Howard No. 7W
Oil Springs Field
Magoffin County, Kentucky 62439

Carter Coordinate 2-P-78, 215' FSL x 1305' FWL

This authorization is in accordance with the limitations, monitoring requirements and other conditions set forth herein. This permit consists of this cover sheet; Part I, 5 pages; Part II, 13 pages; and Part III, 2 pages.

All references to Title 40 of the Code of Federal Regulations are to regulations that are in effect on the date that this permit becomes effective.

This permit shall become effective on JUN 19 1989.

This permit and the authorization to inject shall remain in full force and effect during the operating life of the well, unless this permit is otherwise modified, revoked and reissued, terminated, or a minor modification is made as provided at 40 C.F.R. §§144.39, 144.40 and 144.41. This permit shall be reviewed at least once every five years from the effective date.

JUN 19 1989

Date

Bruce R. Barrett
Bruce R. Barrett, Director
Water Management Division
U.S. Environmental Protection Agency
Region IV

PART I

WELL SPECIFIC CONDITIONS

SECTION A. CONSTRUCTION REQUIREMENTS

Casing and Cementing

The permittee shall maintain casing and cement in the well to prevent the movement of fluids into or between underground sources of drinking water. In addition, the permittee shall be required to perform the work set forth in Part III, Section A.

SECTION B. OPERATING REQUIREMENTS

1. Injection Operation

Beginning on the effective date and lasting through the term of this permit, the permittee is authorized to inject only fluids brought to the surface in connection with conventional oil and natural gas production from the permittee's operations in the Oil Springs Field for enhanced recovery operations under the following conditions:

(a) Injection Zone

Injection shall be limited to the Weir Sand in the perforated interval between 1012 feet and 1036 feet below land surface.

(b) Injection Pressure Limitation

- (i) Maximum injection pressure, measured at the wellhead, shall not exceed 200 psig.
- (ii) Injection at a pressure which initiates or propagates fractures in the confining zone or causes the movement of injection or formation fluids into an underground source of drinking water is prohibited.
- (iii) Injection between the outermost casing protecting underground sources of drinking water and the well bore is prohibited.

2. Loss of Mechanical Integrity During Operation

The permittee shall cease injection if a loss of mechanical integrity as defined at 40 C.F.R. §146.8 becomes evident during operation. Operation shall not be resumed until the permittee has complied with the provisions of Part II, Section G, of this permit regarding mechanical integrity demonstration and testing.

The permittee shall notify the Director of the loss of mechanical integrity in accordance with the reporting procedures in Part II, Section E, item 12(d).

SECTION C. MONITORING REQUIREMENTS

1. Sampling and Analysis Methods

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Grab samples shall be used for the laboratory analysis of the physical and chemical characteristics as specified in Part I, Section C, item 3(a). Test methods and procedures shall be as specified at 40 C.F.R. §136.3 or 40 C.F.R. Part 261, Appendix III. When the analytical method for a particular parameter is not specified at either 40 C.F.R. §136.3 or 40 C.F.R. Part 261, Appendix III, the permittee must obtain the Director's approval of the method used. The permittee shall identify the types of tests and methods used to generate all monitoring data. Reports to be generated from monitoring data are specified in Part I, Section D.

2. Injection Operation Monitoring

The permittee shall monitor the operation of the injection well as follows:

| <u>Parameter</u> | <u>Monitoring Frequency</u> |
|--|-----------------------------|
| Injection Pressure (psig) at Wellhead | Weekly |
| Flow Rate (barrels/day) of Injected Fluid | Weekly |

Cumulative Volume (barrels)
of Injected Fluid

Weekly

Observation and recording of injection pressure, flow rate, and cumulative volume shall be made over equal time intervals beginning on the date on which the well commences operation. Recordings shall be of representative values.

3. Injection Fluid Analysis

The permittee shall conduct an injection fluid analysis at least once every twelve months and whenever changes are made to the injection fluid. Analyses shall be made beginning within twelve months from the effective date of this permit, or twelve months from the most recent analysis, whichever is later. An analysis must include:

- (a) pH, total dissolved solids, and specific gravity; and
- (b) a list of all chemicals and their composition used for any well stimulation and fracturing during that sampling year; and a list of any additives used and their chemical composition, including any inhibitors used to prevent scaling, corrosion, or bacterial growth. These lists should indicate the brand name of the product and the manufacturer.

On the written request of EPA, an injection fluid analysis shall include the following additional constituents: barium, calcium, total iron, magnesium, sodium, bicarbonate, carbonate, chloride, sulfate, carbon dioxide, dissolved oxygen, hydrogen sulfide, and purgeable aromatic hydrocarbons.

SECTION D. REPORTING REQUIREMENTS

1. Reports on Well Tests and Workovers

Within ninety (90) days after the completion of the activity, the permittee shall report to the Director the results of the following:

- (a) Mechanical integrity tests other than those specified in Part III; and
- (b) Any well workover, logging or other test data, other than those specified in Part III, revealing downhole conditions.

2. Reporting of Monitoring Results

Monitoring results, as specified in Part I, Section C, shall be reported each year on EPA Form 7520-11 and must be postmarked by the 28th day of the month following the first full year after the effective date of this permit.

Copies of the monitoring results required by Part I, and all other reports required by Part II, shall be submitted to the Director at the following address:

U. S. Environmental Protection Agency
Region IV, Water Management Division
Ground-Water Protection Branch
Underground Injection Control Section
345 Courtland Street, NE
Atlanta, Georgia 30365

3. Reporting of New Wells Drilled Within the AOR

Within ten (10) days after spud date, the permittee shall report to the Director by certified mail, return receipt requested, the construction plans for any new well within the AOR of the permitted facility that will penetrate the confining zone or injection zone. The permittee shall provide information on proposed construction (including location and quantities of cement), location and depth. This requirement applies to any construction activity regardless of ownership of the well.

If the construction of the new well will not protect USDWs from contamination, the Director may terminate the permit under 40 C.F.R. §144.40(a)(3) if he or she determines that continued injection may endanger human health or the environment.

SECTION E. PLUGGING AND ABANDONMENT PLAN

Plugging and abandonment of the permitted injection well shall be in accordance with Part II, Section F of this permit and 40 C.F.R. §146.10.

The plugging of this injection well shall be performed in the following general manner:

- 1) Kill well as necessary with lease water.
- 2) Run in hole with cement retainer on tubing and set + 50' above top perforation. Establish injection rate with fresh water. Squeeze injection perfs with 20 sacks Class "A" cement.
- 3) Stab out of retainer and place 20 sacks of cement on top of retainer.

- 4) Pull up to 750' and place a cement plug inside the 4 1/2" casing from 750'-550'. WOC.
- 5) Tag top of cement with tubing to verify placement and solidification.
- 6) Pull up to 50' and place a cement plug inside the 4 1/2" casing from 50' to 4' below ground surface.
- 7) Cut casing strings 4' below ground level, weld steel plate on top and restore site.

PART II
GENERAL PERMIT COMPLIANCE

A. EFFECT OF PERMIT

The permittee is allowed to engage in underground injection in accordance with the conditions of this permit. The permittee, authorized by this permit, shall not construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR Part 142 or may otherwise adversely affect the health of persons. Any underground injection activity not specifically authorized in this permit is prohibited. Compliance with this permit does not constitute a defense to any action brought under the SDWA, or any other common or statutory law or regulation. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Nothing in this permit shall be construed to relieve the permittee of any duties under applicable regulations.

B. PERMIT ACTIONS

1. Modification, Revocation, Reissuance and Termination. The Director may, for cause or upon request from the permittee, modify, revoke and reissue, or terminate this permit in accordance with 40 CFR §§ 144.12, 144.39, and 144.40, including but not limited to the following:

- (a) Alterations. There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in this permit.
- (b) Information. The Director has received information which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance.

124.5,

- (c) New regulations. The standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued.
- (d) Compliance schedules. The Director determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, or materials shortage or other events over which the permittee has little or no control and for which there is no reasonably available remedy.
- (e) Proposed transfer. The Director receives notification of a proposed transfer of the permit.
- (f) Noncompliance. Noncompliance by the permittee with any condition of the permit.
- (g) Relevant facts. The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time.
- (h) Endangerment. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.

Also, the permit is subject to minor modifications for cause as specified in 40 CFR §144.41. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the permittee does not stay the applicability or enforceability of any permit condition.

The submittal of an updated application may be required prior to the Director granting a request for permit modification.

2. Transfer of Permits. This permit is not transferable to any person except after notice to and approval by the Director, and in compliance with the requirements and conditions of 40 CFR §144.38.

The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Safe Drinking Water Act.

This permit may be transferred to a new owner or operator by modification according to 40 CFR §144.41(d), if the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Director.

C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

D. CONFIDENTIALITY

In accordance with 40 CFR Part 2 and §144.5, any information submitted to EPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- 1) The name and address of the permittee;
- 2) Information which deals with the existence, absence or level of contaminants in drinking water.

E. DUTIES AND REQUIREMENTS

1. Duty to Comply. The permittee shall comply with all applicable UIC Program regulations and conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit issued in accordance with 40 CFR §144.34. Any permit noncompliance constitutes a violation of the SDWA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. Such non-compliance may also be grounds for enforcement action under RCRA.

2. Penalties for Violations of Permit Conditions. Any person who violates a permit requirement is subject to civil penalties, fines, and other enforcement action under the SDWA and may be subject to such actions pursuant to RCRA. Any person who willfully violates permit conditions may be subject to criminal prosecution.

3. Continuation or Expiring Permits.

(a) Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must submit a complete application for a new permit at least 180 days before this permit expires.

(b) Permit Extensions. The conditions of an expired permit may continue in force in accordance with 5 U.S.C. 558(c) until the effective date of a new permit, if:

(1) The permittee has submitted a timely application which is a complete application for a new permit; and

(2) The Director, through no fault of the permittee, does not issue a new permit with an effective date on or before the expiration date of the previous permit, and

(3) The new permit has not been denied, or if a denial has been appealed, final agency action has not occurred in accordance with 40 CFR §124.19(t)(1).

(c) Effect. Permits continued under 5 U.S.C. 558(c) remain fully effective and enforceable.

(d) Enforcement. When the permittee is not in compliance with the conditions of the expiring or expired permit the Director may choose to do any or all of the following:

(1) Initiate enforcement action based upon the permit which has been continued;

- (2) Issue a notice of intent to deny the new permit. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;
 - (3) Issue a new permit under 40 CFR Part 124 with appropriate conditions; or
 - (4) Take other actions authorized by Underground Injection Control regulations.
- (e) State Continuation. An EPA issued permit does not continue in force beyond its expiration date under Federal law if at that time a State has primary enforcement authority. A State authorized to administer the UIC program may continue either EPA or State-issued permits until the effective date of the new permits, if State law allows. Otherwise, the facility or activity is operating without a permit from the time of expiration of the old permit to the effective date of the State-issued new permit.
- 4. Need to Halt or Reduce Activity not a Defense. It shall not be a defense, for permittee in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
 - 5. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.
 - 6. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

7. Duty to Provide Information. The permittee shall furnish to the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

8. Inspection and Entry. The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

- (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by SDWA, any substances or parameters at any location.

9. Records.

- (a) The permittee shall retain records and all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit for a period of at least five years from the date of the sample, measurement or report.
- (b) The permittee shall maintain records of all data required to complete the permit application form for this permit and any supplemental information submitted under 40 CFR §144.31 for a period of at least five years from the date the application was signed. These periods may be extended by request of the Director at any time.

- (c) The permittee shall retain records concerning the nature and composition of all injected fluids until three years after the completion of plugging and abandonment which has been carried out in accordance with the attached plugging and abandonment plan, and is consistent with 40 CFR §146.10.
 - (d) The permittee shall continue to retain such records after the retention period specified by paragraphs (a) to (c) above, unless he delivers the records to the Director or obtains written approval from the Director to discard the records.
 - (e) Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurements;
 - (2) The individual(s) who performed the sampling or measurements;
 - (3) A precise description of both sampling methodology and the handling (custody) of samples;
 - (4) The date(s) analyses were performed;
 - (5) The names of individual(s) who performed the analyses;
 - (6) The analytical techniques or methods used; and
 - (7) The results of such analyses.
10. Monitoring. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Monitoring results shall be reported at the intervals specified in Part I of this permit.
11. Signatory Requirements.
- (a) All reports or other information, required to be submitted by this permit or requested by the Director, shall be signed and certified in accordance with 40 CFR §144.32, as follows:

- (1) For a corporation: by a responsible corporate officer. For the purpose of this permit, a responsible corporate officer means: (1) a president, secretary, treasurer or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy - or decision making functions for the corporation, or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding 25 million (in second-quarter 1980 dollars); if authority to sign documents has been assigned or delegated to the manager in accordance with corporation procedures. -
 - (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official: or
 - (4) A duly authorized representative.
- (b) A person is a duly authorized representative only if:
- (1) The authorization is made in writing by a person described above;
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
 - (3) The written authorization is submitted to the Director.
- (c) If an authorization under paragraph (b) above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a

new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

- (d) Any person signing a document under paragraphs 11(a) or 11(b) of this Section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

12. Reporting Requirements.

- (a) Planned Changes. The permittee shall give written notice to the Director, as soon as possible, of any planned physical alterations or additions to the permitted facility.
- (b) Anticipated Noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 30 days following each schedule date.
- (d) Twenty-four Hour Reporting.
- (1) The permittee shall report to the Director any non-compliance which may endanger health or the environment. Any information shall be provided orally

within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported orally within 24 hours:

- (i) Any monitoring or other information which indicates that any contaminant may cause an endangerment to an underground source of drinking water.
 - (ii) Any noncompliance with a permit condition, or malfunction of the injection system, which may cause fluid migration into or between underground sources of drinking water.
- (2) A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- (e) Other Non-Compliance. The permittee shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted. The reports shall contain the information listed in Part II, Section E, Item 12(d)(2) above.
- (f) Other Information. When the permittee becomes aware that he failed to submit any relevant facts in the permit application or submitted incorrect information in a permit application or in any report to the Director, the permittee shall submit such facts or information within 10 days.

F. PLUGGING AND ABANDONMENT

1. Notice of Plugging and Abandonment. The permittee shall notify the Director no later than 45 days before conversion or abandonment of the well. The Director may allow a shorter notice period upon written request.

2. Plugging and Abandonment. The permittee shall plug and abandon the well consistent with 40 CFR § 146.10, as provided for in the plugging and abandonment plan incorporated as a part of this permit. Plugging and abandonment shall be completed to ensure that fluids are not allowed to move either into a USDW or from one USDW to another.

Revisions to the Plugging and Abandonment Plan must be submitted to the Director no less than 45 days prior to plugging and abandonment. The Director must approve the revisions prior to the start of plugging operations.

Within 60 days after plugging a well, or at the time of the next quarterly report (whichever is shorter), the permittee shall submit a report to the Director which includes all supporting documentation such as logs and test results. The report shall be certified as accurate by the person who performed the plugging operation, and shall consist of either:

- (a) A statement that the well was plugged in accordance with the plan previously submitted to the Director; or
 - (b) If the actual plugging differed from the approved plan, a statement defining the actual plugging and why the Director should approve such deviation. Any deviation from a previously approved plan may be cause for the Director to require the operator to replug the well.
3. Inactive Wells. After a cessation of injection for two years the permittee shall plug and abandon the well in accordance with the plan unless he:
- (a) Provided notice to the Director including a demonstration that the well will be used in the future; and
 - (b) Described actions or procedures, which are deemed satisfactory by the Director, that the permittee will take to ensure that the well will not endanger USDWs during the period of temporary abandonment. These actions and procedures shall include compliance with the technical requirements applicable to active injection wells unless waived, in writing, by the Director.

G. MECHANICAL INTEGRITY

1. Standards. All injection well(s) must have and maintain mechanical integrity consistent with 40 CFR §146.8.
2. Prohibition Without Demonstration. The permittee shall not commence or continue injection activity after the effective date of this permit unless the permittee has demonstrated that the well covered by this permit has mechanical integrity in accordance with 40 CFR §146.8 and the permittee has received written notice from the Director that such demonstration is satisfactory.
3. Subsequent Mechanical Integrity Demonstrations. A demonstration of mechanical integrity in accordance with 40 CFR §146.8 shall be made no later than five years from the date of the last approved demonstration. Mechanical integrity shall also be demonstrated any time the tubing is removed from the well, the packer is reset, or a loss of mechanical integrity becomes evident during operation. Furthermore, the Director may by written notice require the permittee to demonstrate mechanical integrity at any time. The permittee shall notify the Director of his intent to demonstrate mechanical integrity at least 30 days prior to such demonstration. The Director may allow a shorter time period if it would be sufficient to enable EPA to adequately respond. The permittee shall report the results of a mechanical integrity demonstration within 90 days after completion and in accordance with Part II, Section E, item 11.
4. Loss Of Mechanical Integrity. If the permittee or the Director finds that the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity as defined by 40 CFR §146.8 becomes evident during operation, the injection operation shall be halted immediately and shall not be resumed until the Director gives approval to recommence injection.
5. Test Methods to be Used for Mechanical Integrity Test (MIT). A plan for logging and testing the well for mechanical integrity shall be prepared and submitted for the Director's approval at least 60 days prior to each proposed MIT demonstration date. The Director may allow a shorter time period if it would be sufficient to enable EPA to adequately respond.

The plan shall propose logs and tests specified in 40 CFR §146.8 (as amended from time to time by EPA to include additional approved logs and tests, as published in the Federal Register). The plan shall also propose standards that will be used for evaluating the results of logging and testing. Mechanical integrity will be confirmed if the well logs and test data meet or exceed the standards approved as a result of the Director's review of the plan.

H. FINANCIAL RESPONSIBILITY

1. Financial Responsibility. The permittee shall maintain continuous compliance with the requirement to maintain financial responsibility and resources to close, plug, and abandon the underground injection well(s). The permittee shall not substitute an alternative demonstration of financial responsibility from that which the Director has approved, unless he has previously submitted evidence of that alternative demonstration to the Director and the Director notifies him that the alternative demonstration of financial responsibility is acceptable. The Director may, on a periodic basis, require the holder of a permit to revise the estimate of the resources needed to plug and abandon the well to reflect inflation of such costs and a revised demonstration of financial responsibility, if necessary.
2. Insolvency. In the event of:
 - (a) the bankruptcy of the trustee or issuing institution of the financial mechanism, or
 - (b) suspension or revocation of the authority of the trustee institution to act as trustee, or
 - (c) the institution issuing the financial mechanism loses its authority to issue such an instrument, the permittee must notify the Director, within ten (10) business days. The owner or operator must establish other financial assurance or liability coverage acceptable to the Director, within 60 days after such an event.

An owner or operator must also notify the Director by certified mail of the commencement of voluntary OR INVOLUNTARY proceedings under Title 11 (Bankruptcy), U.S. Code naming the owner or operator as debtor, within 10 business days after the commencement of the proceeding. A guarantor of a corporate guarantee must make such a notification if he is named as debtor, as required under the terms of the guarantee.

I. DEFINITIONS

All terms used in this permit, if not specifically defined in the permit, are defined at 40 C.F.R. Parts 144, 145, 146 and 147.

Part III
Special Conditions

Section A. Construction Requirements

Within ninety (90) days after the effective date of this permit the permittee is required to complete operations for placing additional cement outside the 4 1/2" casing. This operation will involve placing a continuous sheath of cement outside the 4 1/2" casing from a depth corresponding to the existing top of cement back to the surface.

As an alternative to placing additional cement behind the 4 1/2" casing the permittee may complete the well with tubing set on a packer. The packer must be set no higher than 100' above the top perforation.

The work performed under either option must be witnessed by an EPA representative.

In the event the well is recompleted with tubing and packer the following provisions apply.

1. Tubing and Packer

Injection may only take place through tubing with a packer set within the casing no higher than 100' feet above the top perforation. The tubing and packer shall be maintained in a manner which is compatible with the injection operation specified in Part I, Section B, and to prevent the movement of fluids into or between underground sources of drinking water.

2. Annulus Operation

The annulus between the tubing and the long-string casing shall be filled with lease water or other fluid as approved by the Director. The annulus pressure shall be maintained at 0 psig.

The annulus shall be monitored with a gauge designed to indicate both a vacuum (below atmospheric) and positive pressure (above atmospheric). The permittees shall comply with Part I, Section B, item 2 when a change in the annulus pressure of 15 psig occurs. The permittee shall provide an explanation to the Director for the change in pressure and measures that will be taken to restore annulus pressure to achieve compliance with this section. If the cause of annulus pressure change is not corrected within 48 hours, the permittee shall cease injection unless such order to cease operation is waived by the Director.

3. Injection Operation Monitoring

The annulus pressure (psig) measured at the wellhead will be monitored on a weekly basis along with the parameters specified in Part I, Section C, item 2.

4. Plugging and Abandonment

The tubing and packer will be removed from the well prior to the placement of cement as described in Part I, Section E.

Section B. Mechanical Integrity

An internal pressure test on the 4 1/2" casing will be required within ten (10) days of completion of the work performed in compliance with Part III, Section A. This test will require setting a packer or mechanical plug to a depth no higher than 100' above the top perforation and pressuring the casing to at least 300 psi with less than a 3 percent pressure loss in 30 minutes. This test must be witnessed by an EPA representative. Subsequent demonstrations of mechanical integrity will be made no later than two years from the date of the last approved demonstration. If the well is completed with tubing and packer, this demonstration will be made no later than five years from the date of the last approved demonstration.

WELL RECORD

OPERATOR: KENTUCKY NATIONAL OIL COMPANY, Oil Springs, Kentucky

LEASE NAME & WELL NO.: TOM HOWARD NO. 7 W

PERMIT NO.: 20298 TYPE OF WELL: Secondary Recovery Input

LOCATION: 215' FSL & 1305' FWL, Section 2-P-78, Magoffin County, Kentucky

ELEVATION: Drilling Datum - 1074.7 ft., Top of the rig floor
Permanent Datum - 1074.4 ft., Top of the 4½" OD casing

DRILLING CONTRACTOR: Payne Rice, Oil Springs, Kentucky

DRILLING COMMENCED: December 27, 1967
WELL COMPLETED: February 16, 1968

DRILLING COMPLETED: January 20, 1968
OPERATIONS COMMENCED: July 16, 1968

TOTAL DEPTH: 1089 feet

PLUG BACK DEPTH: 1069 feet

CASING RECORD

Surface - 8 5/8" OD SH casing set in nine-inch hole on a shoe @ 18 feet on December 27, 1967.

Water String - 7" OD, 17#, 8RT ST&C, Rge 2, H-40, SH smls. casing set in eight-inch hole on a shoe @ 626 feet on January 11, 1968.
The casing was pulled on January 22, 1968.

Injection Casing - 4½" OD, 9.50#, 8RT ST&C, Rge 2, J-55 new smls. - 33 jts. of casing set in 6½-inch hole @ 1087 feet on January 24, 1968, and cemented with 111 sacks of Class A cement.

COMPLETION HORIZON AND INTERVAL: First Weir Sand 1009 - 1039 feet

PERFORATIONS: 1012' - 1036'; twenty-four (24) feet; with nine (9) 3½" OD, 15-gm., stick jets (0.47" entry hole), one shot every three feet; on January 26, 1968, by Allegheny Nuclear Surveys.

WELL RECORD (CONT'D) OPERATOR: KENTUCKY NATIONAL OIL COMPANY
 LSE. NAME & WELL NO.: TOM HOWARD NO. 7W

FORMATION RECORD

Depths are geophysical log measurements. This formation record has been generalized. For details refer to the geophysical log.

| FORMATION | DESCRIPTION AND/OR NAME | DEPTHS | REMARKS |
|-----------|-------------------------|-------------|---|
| Clay | | 0 - 6 | |
| Sand | | 6 - 42 | Shaly |
| Shale | | 42 - 54 | |
| Sand | | 54 - 68 | Shaly |
| Shale | | 68 - 123 | Sandy |
| Sand | | 123 - 147 | Shaley |
| Shale | | 147 - 210 | Base sandy |
| Sand | FIRST SALT | 210 - 439 | Fresh water-top shaly shale streaks 260'-263' 311'-333', 347' 350' & 405'-408' |
| Shale | | 439 - 519 | |
| Sand | SECOND SALT | 519 - 558 | Fresh water |
| Shale | | 558 - 583 | Sandy |
| Lime | LITTLE | 583 - 591 | |
| Shale | | 591 - 608 | Base sandy |
| Lime | BIG | 608 - 649 | |
| Shale | PEA GREEN | 649 - 883 | |
| Sand | WEIR "A" | 883 - 924 | Gas show - shaly & broken |
| Shale | GRAY | 924 - 953 | |
| Sand | UPPER STRAY | 953 - 967 | No show - shaly & broken |
| Shale | | 967 - 973 | |
| Sand | STRAY | 973 - 994 | Oil show |
| Shale | | 994 - 1009 | |
| Sand | FIRST WEIR | 1009 - 1039 | Oil show |
| Shale | | 1039 - 1046 | |
| Sand | SECOND WEIR | 1046 - 1065 | No show |
| Shale | | 1065 - 1068 | Sandy |
| Sand | THIRD WEIR | 1068 - 1078 | No show |
| Shale | | 1078 - 1081 | Sandy |
| Shale | SUNBURY | 1081 - 1089 | |
| | TOTAL DEPTH | 1089 | |
| | PLUG BACK DEPTH | 1069 | |

KY1530269

13

| | | |
|---|--|--|
| Polu Kai Services, LLC 137 North Washington Street, Suite 301 Falls Church, VA 22046 VA (703) 533-0039 KY (859) 771-5687 | ROUTINE INSPECTION NOTICE | U.S. EPA Region IV 61 Forsyth St. S.W. Atlanta, GA 30303 (404) 562-9424 |
|---|--|--|

REASON FOR INSPECTION

The purpose of inspection by the duly designated representative of the Administrator is to gather data to determine if the person, or person in charge of such, subject to the underground injection control program has acted or is acting in compliance with Section 1445 of the SDWA 42 U.S.C. §300J-4(b). See reverse for quotes of Section 1445 of the SDWA 42 U.S.C. §300J-4(b)(1) and §300J-4(c).

| | | | |
|--------------|-------------------|---------------------|--------------|
| OPERATOR | Loeb & Steinwachs | EPA ID NUMBER | 1530269 |
| CONTACT NAME | | LEASE NAME / WELL # | Tom Howard 7 |
| ADDRESS | | EPA PERMIT NUMBER | KY10229 |
| | | STATE PERMIT NUMBER | 20298 |
| PHONE NUMBER | | DOW NUMBER | 1530116 |

INFORMATION ON TANK Platinum Minerals

WELL LOCATION

| | | | |
|--------|----------|---------------|-----------|
| STATE | KY | LATITUDE N | 37.81744 |
| COUNTY | Magothin | LONGITUDE W | -83.02858 |
| | | ELEVATION GPS | 1035' |

WELL COMPLETION

| | | | | | | | | | |
|------------|----|-----------------|---|-----------------|---|-------------|-------|-------------|-------|
| CLASS WELL | 25 | CASING INJECTOR | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> | TUBING & PACKER | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> | CASING SIZE | 4 1/2 | TUBING SIZE | 2 3/8 |
|------------|----|-----------------|---|-----------------|---|-------------|-------|-------------|-------|

OPERATIONAL DATA

| | | | | | | | | | | | |
|----------------|----------|------------|----|-------------|-----|----------|----|--------------|---|---------------|-----|
| (AC) | SI | TA | AB | PA | CP | UC | NC | DE | AN | UK | |
| INJECTED FLUID | produced | TUBING PSI | 0 | ANNULUS PSI | N/A | PUMP PSI | 0 | OPEN ANNULUS | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> | ANNULUS FLUID | N/A |

GENERAL SURFACE CONDITION OF WELL SITE: Good

ADVERSE FINDINGS / PROBLEMS / INCIDENTS ENCOUNTERED/WHO NOTIFIED? DESCRIBE:

plugged Annulus

PERSONS ENCOUNTERED:

| | | | |
|-------|---------------|--------|--------|
| NAME: | CONTACT INFO: | PHONE: | EMAIL: |
| NAME: | CONTACT INFO: | PHONE: | EMAIL: |
| NAME: | CONTACT INFO: | PHONE: | EMAIL: |

PHOTO #1 INJECTION WELL / FOCUS OR REFERNECE WELL) : DESCRIPTION

PHOTO #2 (TANK BATTERY), DESCRIPTION: NiceGPS LOCATION 37.81815
-83.02968

PHOTO #3 DESCRIPTION

GPS LOCATION

PHOTO #4 DESCRIPTION

GPS LOCATION

ADDITIONAL PHOTOS WITH DESCRIPTION AND GPS LOCATION:

| | | | |
|-------------------------|------|--|----------------------|
| OPERATOR REPRESENTATIVE | | UIC INSPECTOR (Polu Kai Services, LLC) | |
| NAME | | NAME | |
| SIGNATURE | | SIGNATURE | <u>C. W. O'Brien</u> |
| ADDRESS | | DATE | 3.13.14 |
| PHONE | DATE | | |

MECHANICAL INTEGRITY TEST INSPECTION FORM

U. S. Environmental Protection Agency (EPA)
Underground Injection Control (UIC) Program
Field Representative, Senior Executive Employee (SEE) Inspector

Company Name: Platinum Minerals Contact Person: Jim Howard
Address: PO Box 361 City: Salersville State: Ky
Zip: 41465 Phone Number: (606) 349-3960

WELL DESCRIPTION/LOCATION

EPA ID No.: KYS1530269 EPA Permit No.: KY20229 Rule-Auth? Y/N
Lease Name: Tom Howard Well No.: 7 State Permit No.:
DOW Tank Battery Registration No.: Name on Tank Battery:
GPS Longitude: W 83.02866° GPS Latitude: N 37.81745°
Carter Coordinates: 2 P 78 FNL/STD 215 (FT) FEL/WD 1305 (FT)

WELL COMPLETION

Class: II ☒ V ☐ TOTAL DEPTH 1069 (FT) SURFACE ELEVATION (FT)

Injection Type: Gravity ☐ Pump ☐ casing injector? Y/N tubing & packer? Y/N

| CASING STRING | CASING DIAMETER | CEMENT SHOE DEPTH | CEMENT VOLUME (SACKS/TYPE) | TOP OF CEMENT |
|---------------|-----------------|-------------------|----------------------------|---------------|
| SURFACE | | | | |
| INTERMEDIATE | | | | |
| PRODUCTION | <u>4 1/2"</u> | <u>1087'</u> | <u>111 Sx A</u> | |
| TUBING | <u>2 3/8"</u> | | | |

TOP OF CEMENT CALCULATED FROM: RECORDS ☐ CEMENT BOND LOG ☐ REMEDIAL ☐

| | | | |
|--------------|--------------------|---------------------|-------------|
| PACKER TYPE | <u>Leakin</u> | INJECTION FORMATION | |
| PACKER DEPTH | <u>1000'</u> | FORMATION NAME | <u>Weir</u> |
| PERFORATIONS | <u>1012'-1036'</u> | TOP ELEVATION | |

OPERATIONAL DATA

WELL STATUS: AC [Active (AC), Temporarily abandoned (TA), Shut-In (SI), Plugged & Abandoned (PA), Abandoned (AB), Plugged and abandoned without EPA approval (AN), Under Construction (UC), Not Constructed (NC), Converted to Production (CP)]

Connected? ☒ N Injecting? ☒ N

Injected Fluid: freshwater? ☐ salt water? ☒ combination? ☐ annular fluid: ☐

injection rate (bbl/day) 10 injection Pressure (psi) 100 is annulus open? Y/N

tubing PSI ☐ annulus PSI ☐ pump PSI ☐

ANNULAR PRESSURE TEST:

| INITIAL TEST PRESSURE (PSI) | FINAL TEST PRESSURE (PSI) | PRESSURE CHANGE (+/- PSI) | LENGTH OF TEST |
|--------------------------------|------------------------------|------------------------------|----------------|
| 302 | 302 | - | 30 minutes |
| | | | |

Comments/Findings:

P/V 8

RECEIPT OF THIS NOTICE IS HEREBY ACKNOWLEDGED:

SIGNATURES

Operator Representative: Jimmy R. Howard

SEE Inspector:

INSPECTION DATE:

3/29/12

KYS1530269

Met 3-29-12

Polu Kai Services, LLC
137 North Washington Street, Suite 301
Falls Church, VA 22046
VA (703) 533-0039
KY (859) 771-5687

**ROUTINE
INSPECTION
NOTICE**

U.S. EPA
Region IV
61 Forsyth St. S.W.
Atlanta, GA 30303
(404) 562-9424

REASON FOR INSPECTION

The purpose of inspection by the duly designated representative of the Administrator is to gather data to determine if the person, or person in charge of such, subject to the underground injection control program has acted or is acting in compliance with Section 1445 of the SDWA 42 U.S.C. §300J-4(b). See reverse for quotes of Section 1445 of the SDWA 42 U.S.C. §300J-4(b)(1) and §300J-4(c).

| | | | |
|--------------|-------------------|---------------------|--------------|
| OPERATOR | Loeb & Steinwachs | EPA ID NUMBER | 1530269 |
| CONTACT NAME | | LEASE NAME / WELL # | Tom Howard 7 |
| ADDRESS | | EPA PERMIT NUMBER | KY10229 |
| | | STATE PERMIT NUMBER | 20298 |
| PHONE NUMBER | | DOW NUMBER | N/A |

INFORMATION ON TANK N/A

WELL LOCATION

| | | | |
|--------|----------|---------------|-----------|
| STATE | KY | LATITUDE N | 37.81744 |
| COUNTY | Magothin | LONGITUDE W | -83.02858 |
| | | ELEVATION GPS | 989' |

WELL COMPLETION

CLASS WELL ☒ 2 ☐ 5 CASING INJECTOR YES ☐ NO ☒ TUBING & PACKER YES ☒ NO ☐ CASING SIZE 4 1/2 TUBING SIZE 2 3/8

OPERATIONAL DATA

☒ AC ☐ SI ☐ TA ☐ AB ☐ PA ☐ CP ☐ UC ☐ NC ☐ DE ☐ AN ☐ UK
INJECTED FLUID Produced TUBING PSI 0 ANNULUS PSI N/A PUMP PSI 0 OPEN ANNULUS YES ☐ NO ☒ ANNULUS FLUID N/A

GENERAL SURFACE CONDITION OF WELL SITE:

ADVERSE FINDINGS / PROBLEMS / INCIDENTS ENCOUNTERED/WHO NOTIFIED? DESCRIBE:

New owner Platinum Minerals 606-424-3899 Henrey Lyons Box 361
Salyersville Ky 41465

PERSONS ENCOUNTERED:

| | | | |
|-------|---------------|--------|--------|
| NAME: | CONTACT INFO: | PHONE: | EMAIL: |
| NAME: | CONTACT INFO: | PHONE: | EMAIL: |
| NAME: | CONTACT INFO: | PHONE: | EMAIL: |

PHOTO #1 INJECTION WELL / FOCUS OR REFERNECE WELL) : DESCRIPTION


PHOTO #2 (TANK BATTERY), DESCRIPTION: GPS LOCATION
Pumphouse

PHOTO #3 DESCRIPTION GPS LOCATION

PHOTO #4 DESCRIPTION GPS LOCATION

ADDITIONAL PHOTOS WITH DESCRIPTION AND GPS LOCATION:

| | | | |
|-------------------------|------|--|-------------------|
| OPERATOR REPRESENTATIVE | | UIC INSPECTOR (Polu Kai Services, LLC) | |
| NAME | | NAME | |
| SIGNATURE | | SIGNATURE | C. W. [Signature] |
| ADDRESS | | DATE | 7-25-12 |
| PHONE | | | |
| | DATE | | |

| | | | | | | | |
|--|--|---|--|--|--|-----------------------------|--|
| Polu Kai Services, LLC 137 North Washington Street, Suite 301 Falls Church, VA 22046 VA (703) 533-0039 KY (859) 771-5687 | | ROUTINE INSPECTION NOTICE | | <div style="text-align: right; font-size: small; margin-bottom: 5px;">MIT 12.5.07</div> U.S. EPA Region IV 61 Forsyth St. S.W. Atlanta, GA 30303 (404) 562-9424 | | | |
| REASON FOR INSPECTION The purpose of inspection by the duly designated representative of the Administrator is to gather data to determine if the person, or person in charge of such, subject to the underground injection control program has acted or is acting in compliance with Section 1445 of the SDWA 42 U.S.C. §300J-4(b). See reverse for quotes of Section 1445 of the SDWA 42 U.S.C. §300J-4(b)(1) and §300J-4(c). | | | | | | | |
| OPERATOR | | Loeb & Steinwachs | | EPA ID NUMBER | | 1530269 | |
| CONTACT NAME | | | | LEASE NAME / WELL # | | Tom Howard 7-W | |
| ADDRESS | | | | EPA PERMIT NUMBER | | KY10229 | |
| | | | | STATE PERMIT NUMBER | | 20298 | |
| PHONE NUMBER | | | | DOW NUMBER | | 1530116 | |
| INFORMATION ON TANK | | | | | | | |
| WELL LOCATION | | | | | | | |
| STATE | | Ky | | LATITUDE N | | 37.81740 | |
| COUNTY | | Magoffin | | LONGITUDE W - | | 83.02869 | |
| | | | | ELEVATION GPS | | 1157' | |
| WELL COMPLETION | | | | | | | |
| CLASS WELL <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 5 | | CASING INJECTOR | | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> | | TUBING & PACKER | |
| | | | | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> | | CASING SIZE | |
| | | | | | | 4 1/2 | |
| | | | | | | TUBING SIZE | |
| | | | | | | 2 3/8 | |
| OPERATIONAL DATA | | | | | | | |
| <input checked="" type="checkbox"/> AC | | <input type="checkbox"/> SI | | <input type="checkbox"/> TA | | <input type="checkbox"/> AB | |
| <input type="checkbox"/> PA | | <input type="checkbox"/> CP | | <input type="checkbox"/> UC | | <input type="checkbox"/> NC | |
| <input type="checkbox"/> DE | | <input type="checkbox"/> AN | | <input type="checkbox"/> UK | | | |
| INJECTED FLUID | | NONE | | TUBING PSI | | <input type="checkbox"/> | |
| ANNULUS PSI | | <input type="checkbox"/> | | PUMP PSI | | <input type="checkbox"/> | |
| OPEN ANNULUS | | YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> | | ANNULUS FLUID | | N/A | |
| GENERAL SURFACE CONDITION OF WELL SITE: Good | | | | | | | |
| ADVERSE FINDINGS / PROBLEMS / INCIDENTS ENCOUNTERED/WHO NOTIFIED? DESCRIBE: | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| PERSONS ENCOUNTERED: | | | | | | | |
| NAME: | | CONTACT INFO: | | PHONE: | | EMAIL: | |
| NAME: | | CONTACT INFO: | | PHONE: | | EMAIL: | |
| NAME: | | CONTACT INFO: | | PHONE: | | EMAIL: | |
| PHOTO #1 (INJECTION WELL / FOCUS OR REFERNECE WELL) : DESCRIPTION | | | | | | | |
| PHOTO #2 (TANK BATTERY), DESCRIPTION: | | | | GPS LOCATION | | | |
| PHOTO #3 DESCRIPTION | | | | GPS LOCATION | | | |
| PHOTO #4 DESCRIPTION | | | | GPS LOCATION | | | |
| ADDITIONAL PHOTOS WITH DESCRIPTION AND GPS LOCATION: | | | | | | | |
| OPERATOR REPRESENTATIVE | | | | UIC INSPECTOR (Polu Kai Services, LLC) | | | |
| NAME | | | | NAME | | | |
| SIGNATURE | | | | SIGNATURE  | | | |
| ADDRESS | | | | DATE | | | |
| PHONE | | | | 3.25.10 | | | |



United States Environmental Protection Agency
Washington, DC 20460

ANNUAL DISPOSAL/INJECTION WELL MONITORING REPORT

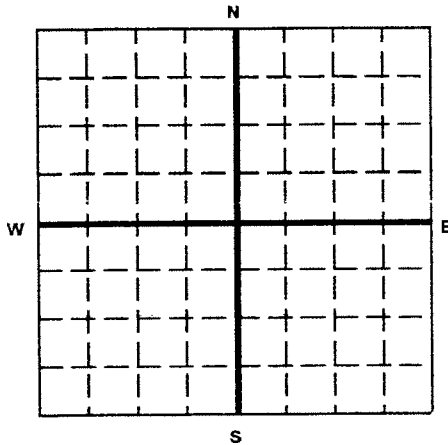
Name and Address of Existing Permittee

Lobe & Steinwachs
P.O. Box 524
Lawrenceville Ill 62439

Name and Address of Surface Owner

Tim Tackett
843 Twin Lick
Sellersville Ky 41465

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Kentucky

County

Magoffin

Permit Number

Surface Location Description

1/4 of 1/4 of 1/4 of 1/4 of Section Township Range

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface 2-P-78 ELV 1064

Location ft. from (N/S) Line of quarter section FSL 925

and ft. from (E/W) Line of quarter section FWL 1875

WELL ACTIVITY

TYPE OF PERMIT

☐ Brine Disposal

☐ Individual

☒ Enhanced Recovery

☐ Area

☐ Hydrocarbon Storage

Number of Wells

Lease Name Tom Howard

Well Number W6-W7-W8

multiple wells?

INJECTION PRESSURE

TOTAL VOLUME INJECTED

TUBING - CASING ANNULUS PRESSURE
(OPTIONAL MONITORING)

| MONTH | YEAR | AVERAGE PSIG | MAXIMUM PSIG | BBL | MCF | MINIMUM PSIG | MAXIMUM PSIG |
|-------|------|--------------|--------------|-----|-----|--------------|--------------|
| 1 | 2011 | 100 | 100 | 120 | | | |
| 2 | 2011 | 100 | 100 | 100 | | | |
| 3 | 2011 | 100 | 100 | 120 | | | |
| 4 | 2011 | 100 | 100 | 120 | | | |
| 5 | 2011 | 100 | 100 | 125 | | | |
| 6 | 2011 | 100 | 100 | 120 | | | |
| 7 | 2011 | 100 | 100 | 120 | | | |
| 8 | 2011 | 100 | 100 | 120 | | | |
| 9 | 2011 | 100 | 100 | 120 | | | |
| 10 | 2011 | 100 | 100 | 115 | | | |
| 11 | 2011 | 100 | 100 | 125 | | | |
| 12 | 2011 | 100 | 100 | 120 | | | |

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title (Please type or print)

Darrin Howard V.P.

Signature

Darrin Howard

Date Signed

01-31-2012



MINERAL LABS INC.

Box 549
Salyersville, Kentucky 41465
Phone (606)349-6145
Fax (606)349-6102

Certificate of Analysis

Platinum Minerals
P.O. Box 361
Salyersville, KY 41465

Date/Time Collected: 1/30/2012 0:01:00
Date/Time Received: 1/30/2012 16:12:00
Lab Number: 120000860

Attention:
Test Type:
Site ID:
Location: Lobe & Steinwachs

Permit Number:

| Parameter | Result | Units | Method | MRL | Date/Time/Tech Analyzed |
|------------------------|--------|-------|---------------------|------|-------------------------|
| pH | 6.06 | std | SM 18th 4500 H + -B | 0.01 | 1/30/12 16:20 SRC |
| Specific Gravity | 1.10 | | ASTM D1429 | 0.04 | 1/31/12 9:25 KS |
| Total Dissolved Solids | 108405 | mg/L | SM 18th 2540 C | 10 | 1/31/12 13:30 SRC |

U.S. EPA REGION 4
GWD WB
2012 FEB -2 A 11:53

*Taken on Site

NDP = No Data Provided

CLT = Client

ND = Not Detected

The analyses above are reported to the best of my knowledge and belief.

Submitted By:

Sharlonda Carroll

Sharlonda Carroll

Environmental Manager



120000860